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CONSOLIDATED TRANSLATION SURVEY

Number 145

Through 31 January 1970

CENTRAL INTELLIGENCE AGENCY
Washington, D.C. 20505

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CONSOLIDATED TRANSLATION SURVEY

FOR JANUARY 1970

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CONSOLIDATED TRANSLATION SURVEY

PREFACE

This survey is prepared monthly from lists received through the cooperation of US government agencies and includes universities, research institutions, and commercial translation organizations. It is a compilation of projects completed or started during the preceding month.

Translations are listed by area and subject category. Scientific projects are grouped as a section regardless of geographic area. Title in English, author, foreign language title of source of material, date of publication, and publication identifications of the completed project are given when available. Tables of contents of journals translated cover-to-cover are reproduced from the current publications.

Projects in process, i.e., not completed as of the date of this survey, are noted with an asterisk (*), and when available, a project-control or "in-process" number is noted in parentheses following the title. Certain details may be unavailable on such projects. New projects in process are not listed again until they are completed.

An index to authors of items in this issue is provided at the end of the survey.

Scientific and technical translations are grouped according to the COSATI subject category list except for military science and ordnance items which are listed under "military" in the appropriate geographic areas.

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ACSI - (see DIA)

AEC - Atomic Energy Commission
(see CFSTI)

AFCRL Res Lib

Air Force Cambridge Research Laboratories
Research Library
Office of Aerospace Research
United States Air Force
Laurence G. Hanscom Field
Bedford, Massachusetts
ATTN: CRMCLR

AGI

American Geological Institute
1444 "N" Street, NW
Washington, D.C. 20005

AGU

American Geophysical Union
Suite 506
1145 19th Street, NW
Washington, D. C. 20036

AIP

American Institute of Physics
335 East 45th Street
New York, New York 10017

Amer Math Soc

American Mathematical Society
P.O. Box 6248
Providence, Rhode Island 02904

ANL - Argonne National Laboratory, Illinois
(see AEC)

APL/JHU

Applied Physics Laboratory
The Johns Hopkins University
8621 Georgia Avenue
Silver Spring, Maryland 20910

BCF - Bureau of Commercial Fisheries
(see Dept of Inter).

BISI

British Iron and Steel Industry Translation Service
The Iron and Steel Institute
4 Grosvenor Gardens
London, S.W. 1, England

CB - Consultants Bureau (see Plenum Press)

CEGB

Central Library
Central Electricity Generating Board
Room 601, Sudbury House
15 Newgate Street
London, E.C. 1, England

CFSTI

Clearinghouse for Federal Scientific and Technical
Information
Port Royal and Braddock Roads
Springfield, Virginia 22151

CTT

Columbia Technical Translations
5 Vermont Avenue
White Plains, New York 10600

Dept of Interior

Department of Interior
Room 8015
Branch of Foreign Fisheries (Translations)
Division of International Affairs
Bureau of Commercial Fisheries
Washington, D.C. 20240

DIA

Defense Intelligence Agency
Washington, D.C. 20301

FP

Faraday Press, Incorporated
84 Fifth Avenue
New York, New York 10011

FSTC

Defense Documentation Center
Cameron Station
Alexandria, Virginia 22314

FTD

Defense Documentation Center
Cameron Station
Alexandria, Virginia 22314

HB

Henry Bratcher Technical Translations
P.O. Box 157
Altadena, California 91001

HEW - (see NIH)

IEEE

Institute of Electrical and Electronics Engineers
275 Madison Avenue
New York, New York 10016

JPRS

U.S. Department of Commerce
Clearinghouse for Federal Scientific and Technical
Information
Port Royal and Braddock Roads
Springfield, Virginia 22151

NASA

National Aeronautics and Space Administration
1512 H Street, NW
Washington, D. C. 20546

NIC

Commander, Naval Intelligence Command
Naval Intelligence Command Headquarters
NIC-133E
Washington, D. C. 20350

NIH

Circulation Unit
Readers Services Section
Library Branch, DRS
National Institutes of Health
Building 10, Room 5N118
Bethesda, Maryland 20014

NOO

U.S. Naval Oceanographic Office
Code 4400
Washington, D.C. 20390

ORNL - Oak Ridge National Laboratory
(see AEC)

OSA

Optical Society of America, Incorporated
American Institute of Physics
335 East 45th Street
New York, New York 10017

PG

Petroleum Geology
P.O. Box 171
McLean, Virginia 22101

Plenum Press

Plenum Publishing Corporation
114 Fifth Avenue
New York, New York 10011

PP

Pergamon Press, Incorporated
44-01 21st Street
Long Island City, New York 11101

PS

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11 Bleecker Street
New York, New York 10012

RSIC - Defense Documentation Center,
Redstone Scientific Information Center
(see CFSTI)

SIC

Scientific Information Consultants, Limited
661 Finchley Road
London, N.W. 2, England

SLAC - Stanford Linear Accelerator Center
(see AEC)

/
SSSA

Soil Science Society of America, Incorporated
Program Director, Soviet Soil Science
677 South Segoe Road
Madison, Wisconsin 53711

Survey of China Mainland Press

Survey of China Mainland Press
American Consulate General
Hong Kong

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American Consulate General
Hong Kong

UCRL

University of California
Lawrence Radiation Laboratory
Livermore, California
(see AEC)

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Editorial Urges Better Accounting Practices,
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Lenin's Works on Opportunism Called Valid Today, by L. Dribin, 10 pp.
RUSSIAN, per, Kommunist Sovetskoy Latvii, Riga, No 11, Nov 1969, pp 2-8.
JPRS 49514

Tadzhik First Secretary Speaks on Kolkhoz Charter, by D. R. Rasulov, 10 pp.
RUSSIAN, per, Kommunist Tadzhikistana, Dushanbe, 30 Oct 1969, pp 2-3.
JPRS 49339

Two Stories; Thoughts and Feelings of Soviet Man, by Ya. El'sberg, 6 pp.
RUSSIAN, np, Literaturnaya Gazeta, Moscow, 19 Nov 1969, p 4.
JPRS 49577

Children's Stories About Lenin Reviewed, by Igor Motyashov, 7 pp.
RUSSIAN, per, Literaturnaya Rossiya, Moscow, 5 Dec 1969, pp 2-3.
JPRS 49577

Novyy Mir Critics Criticized, 7 pp.
RUSSIAN, per, Moskva, Moscow, No 11, Nov 1969, pp 199-202.
JPRS 49548

Efficiency of Party Organization Improved, by F. Ivankov, 7 pp.
RUSSIAN, per, Partiynaya Zhizn', Moscow, No 20, Oct 1969, pp 32-37.
JPRS 49514

Responsibilities of Party Commissions Discussed, 8 pp.
RUSSIAN, per, Partiynaya Zhizn', Moscow, No 21, Nov 1969, pp 41-45.
JPRS 49514

Lenin's Predictions Applied to Current Society, by A. Aleksandrov, Yu. Ozhegov, 9 pp.
RUSSIAN, np, Pravda, Moscow, 24 Oct 1969, pp 2-3.
JPRS 49415

Leningrad Party Supervises Technical Progress, by N. Semenov, 5 pp.
RUSSIAN, np, Pravda, Moscow, 17 Nov 1969, p 2.
JPRS 49548

Private Potatoes Take Precedence Over Party Work, by N. Lyaporov, 5 pp.
RUSSIAN, np, Pravda, Moscow, 3 Dec 1969, p 2.
JPRS 49577

Kiev Delegate to Congress Reports Kolkhoz Progress, by A. G. Buznitskiy, 6 pp.
RUSSIAN, np, Pravda Ukrainy, Kiev, 27 Nov 1969, p 3.
JPRS 49516

Kebin Reports to Estonian Kolkhoz Congress, by I. G. Kebin, 7 pp.
RUSSIAN, np, Sovetskaya Estoniya, Tallin, 31 Oct 1969, p 3.
JPRS 49339

Lithuanian Party Reports, Elections Reviewed, by V. Kharasov, 7 pp.
RUSSIAN, np, Sovetskaya Litva, Viln'yus, 26 Oct 1969, p 2.
JPRS 49415

Antimilitary Soviet Literature Criticized, by F. Mazhayev, Ye. Zakerskiy, 5 pp.
RUSSIAN, np, Sovetskaya Rossiya, Moscow, 21 Nov 1969, p 3.
JPRS 49514

Guidance Provided for Political Indoctrination,
by G. Dubrovskiy, 7 pp.
RUSSIAN, per, Sovetskiy Patriot, Moscow, 3 Dec
1969, pp 2-3.
JPRS 49513.

Improvements in State Bureaucracy Called For,
by A. Ye. Lunev, 12 pp.
RUSSIAN, per, Sovetskoye Gosudarstvo i Pravo,
Moscow, 17 Sept 1969, pp 20-27.
JPRS 49415

Editorial Outlines Problems of Legal Science,
12 pp.
RUSSIAN, per, Sovetskoye Gosudarstvo i Pravo,
Moscow, Oct 1969, pp 3-10.
JPRS 49415

Constitutional Law to be Used in Court Practice,
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RUSSIAN, per, Sovetskoye Gosudarstvo i Pravo,
Moscow, Oct 1969, pp 42-51.
JPRS 49415

Need for Forecasting in State Bodies Stressed,
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RUSSIAN, per, Sovetskoye Gosudarstvo i Pravo,
Moscow, Oct 1969, pp 108-117.
JPRS 49415

U. S. View on Peaceful Use of Sea Bottom Criticized,
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RUSSIAN, per, Sovetskoye Gosudarstvo i Pravo,
Moscow, Oct 1969, pp 117-122.
JPRS 49415

Elimination of Bureaucratic Elements in State
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RUSSIAN, per, Sovetskoye Gosudarstvo i Pravo,
Moscow, No 11, 1969, pp 21-29.
JPRS 49536

Democratic Centralism Cited as Basis of Control,
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RUSSIAN, per, Sovetskoye Gosudarstvo i Pravo,
Moscow, No 11, 1969, pp 30-38.
JPRS 49536

Methods, Forms, System of Kolkhoz Law Discussed,
by V. Z. Yanchuk, 10 pp.
RUSSIAN, per, Sovetskoye Gosudarstvo i Pravo,
Moscow, No 11, 1969, pp 60-65.
JPRS 49536

Jurists Discuss Causes of Theft in Trade System,
by L. A. Andreyeva, G. A. Levitskiy, 7 pp.
RUSSIAN, per, Sovetskoye Gosudarstvo i Pravo,
Moscow, No 11, 1969, pp 104-106.
JPRS 49536

Turkmen Party Official Discusses Kolkhoz
Charter, by B. Ovezov, 7 pp.
RUSSIAN, per, Turkmenskaya Iskra, Ashkhabad,
Nov 1969, p 3.
JPRS 49339

Supreme Soviet Ratifies Nonproliferation Treaty,
9 pp.
RUSSIAN, per, Vedomosti Verkhovnogo Soveta SSSR,
Moscow, 26 Nov 1969, pp 654-662.
JPRS 49536

Estonian Party Organizations Spur Agriculture,
by I. G. Kebin, 18 pp.
RUSSIAN, per, Voprosy Istorii KPSS, Moscow,
No 10, 1969, pp 17-29.
JPRS 49339

Theory of Socialist Development Discussed, by
V. S. Semenov, 19 pp.
RUSSIAN, per, Voprosy Istorii KPSS, Moscow,
Oct 1969, pp 44-57.
JPRS 49514

Methods for Improving Party Work Described,
by V. P. Mzhavandze, 27 pp.
RUSSIAN, per, Voprosy Istorii KPSS, Moscow, No 11,
Nov 1969, pp 3-17.
JPRS 49536

Capitalist Convergence Theories Criticized, by
Z. P. Ivanova, 17 pp.
RUSSIAN, per, Voprosy Istorii, Moscow, No 11,
Nov 1969, pp 65-77.
JPRS 49514

Discussion of New Kolkhoz Charter Reviewed,
by Georgiy Radov, 13 pp.
RUSSIAN, per, Zhurnalist, Moscow, No 10,
1969, pp 4-8.
JPRS 49339

Report on Meeting of Communist Writers of Kiev,
7 pp.
UKRAINIAN, per, Literaturna Ukraina, Kiev, 21 Nov
1969, pp 1-2.
JPRS 49514

USSR
Military

USSR
Military (Contd)

7.62 MM Company Machine Gun 1946 Model (R. P. - 46), 101 pp.
RUSSIAN, bk, 1968.
ARM/FSTC/HT-23-647-69

The 7.62 MM Kalashnikov Automatic Rifle, 93 pp.
RUSSIAN, bk.
ARM/FSTC/HT-23-648-69

Book Reviewed on History of Pacific Fleet, by I. Isayev, 6 pp.
RUSSIAN, per, Dal'niy Vostok, Khabarovsk, Sept 1969, pp 151-153.
JPRS 49513

In Neutral Waters, by M. Sagatelyan.
RUSSIAN, np, Izvestiya, 7 & 18 October 1969.
Dept of Navy NIC Tran 2941

Role of Military Publications Discussed, by A. Kopytin, 13 pp.
RUSSIAN, per, Kommunist Vooruzhennykh Sil, Moscow, Oct 1969, pp 32-38.
JPRS 49445

General Praises Personal Services for Military Personnel, by Ye. Gold'berg, 9 pp.
RUSSIAN, per, Kommunist Vooruzhennykh Sil, Moscow, Oct 1969, pp 39-43.
JPRS 49445

Anniversary of Artillery, Rocket Troops Marked, 11 pp.
RUSSIAN, per, Kommunist Vooruzhennykh Sil, Moscow, Oct 1969, pp 44-48.
JPRS 49445

50th Anniversary of Signal Troops Marked, 8 pp.
RUSSIAN, per, Kommunist Vooruzhennykh Sil, Moscow, Oct 1969, pp 49-52.
JPRS 49445

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RUSSIAN, per, Kommunist Vooruzhennykh Sil, Moscow, Oct 1969, pp 53-57.
JPRS 49445

Kiev Higher Naval Political School Discussed, by M. Zimenkov, 13 pp.
RUSSIAN, per, Kommunist Vooruzhennykh Sil, Moscow, Oct 1969, pp 58-64.
JPRS 49445

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RUSSIAN, per, Kommunist Vooruzhennykh Sil, Moscow, Oct 1969, pp 71-76.
JPRS 49445

Military Constructor, Be Master of Your Trade, by V. Volkov, 8 pp.
RUSSIAN, per, Kommunist Vooruzhennykh Sil, Moscow, Oct 1969, pp 77-80.
JPRS 49445

Missile Testing Facility Visit Described, by N. Gorbachev, 5 pp.
RUSSIAN, np, Komsomol'skaya Pravda, Moscow, 19 Nov 1969, p 4.
JPRS 49513

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RUSSIAN, np, Krasnaya Zvezda, Moscow, 26 Oct 1969, p 2.
JPRS 49341

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RUSSIAN, np, Krasnaya Zvezda, Moscow, 31 Oct 1969, p 2.
JPRS 49341

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JPRS 49494

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RUSSIAN, np, Krasnaya Zvezda, Moscow, 11 Nov 1969, p 2.
JPRS 49389

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RUSSIAN, np, Krasnaya Zvezda, Moscow, 11 Nov 1969, p 4.
JPRS 49389

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RUSSIAN, np, Krasnaya Zvezda, Moscow, 12 Nov 1969, p 2.
JPRS 49389

USSR
Military (Contd.)

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JPRS 49462

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RUSSIAN, np, Krasnaya Zvezda, Moscow, 16 Nov 1969, p 2.
JPRS 49462

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RUSSIAN, np, Krasnaya Zvezda, Moscow, 19 Nov 1969, p 2.
JPRS 49494

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RUSSIAN, np, Krasnaya Zvezda, Moscow, 20 Nov 1969, p 2.
JPRS 49462

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RUSSIAN, np, Krasnaya Zvezda, Moscow, 20 Nov 1969, p 4.
JPRS 49462

Diversion of Airmen from Basic Duties Assailed, by I. Dynin, 6 pp.
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JPRS 49462

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JPRS 49462

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JPRS 49462

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RUSSIAN, np, Krasnaya Zvezda, Moscow, 22 Nov 1969, p 6.
JPRS 49462

USSR
Military (Contd.)

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JPRS 49389

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RUSSIAN, per, Kryl'ya Rodiny, Moscow, Oct 1969, pp 36-37.
JPRS 49389

Military Publishing House Activities Described, by S. Abramov, 5 pp.
RUSSIAN, per, Literaturnaya Gazeta, Moscow, No 44, Oct 1969, p 3.
JPRS 49341

Excerpts From the Officers Handbook of Military Topography of the USSR, by A. M. Gorodukhin, M. V. Gamezo, 18 pp.
RUSSIAN, bk, Officers Handbook of Military Topography of the USSR, pp 166-176, 246-252.
ARM/ESTC/INT-23-718-69

Marshal Koshevoy Comments on Troop Readiness, by P. Koshevoy, 5 pp.
RUSSIAN, per, Starshina Serzhant, Moscow, Oct 1969, pp 1-3.
JPRS 49431

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JPRS 49431

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JPRS 49431

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RUSSIAN, per, Voyenno-Istoricheskiy Zhurnal, Moscow, Sept 1969, pp 47-58; Oct 1969, pp 63-75.
JPRS 49328

Marshall Rokossovskiy Memoirs Reviewed, by M. Kir'yan, 7 pp.
RUSSIAN, per, Voyenno-Istoricheskiy Zhurnal, Moscow, No 10, 1969, pp 89-93.
JPRS 49414

USSR
Military (Contd)

USSR
Sociological

Taman' Army Civil War Exploits Marked, by
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No 10, 1969, pp 93-95.
JPRS 49414

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Moscow, No 10, 1969, pp 99-105.
JPRS 49414

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by A. Aristov, 9 pp.
RUSSIAN, per, Voyenno-Istoricheskiy Zhurnal, Moscow,
No 10, 1969, pp 119-125.
JPRS 49414

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RUSSIAN, per, Voyenno-Istoricheskiy Zhurnal, Moscow,
Nov 1969, pp 87-92.
JPRS 49494

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RUSSIAN, per, Voyennyye Znaniya, Moscow, No 10,
Oct 1969, pp 8-9.
JPRS 49389

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RUSSIAN, per, Voyennyye Znaniya, Moscow, No 10,
Oct 1969, pp 10-12.
JPRS 49389

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RUSSIAN, per, Voyennyye Znaniya, Moscow,
No 10, Oct 1969, pp 31-32.
JPRS 49389

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RUSSIAN, per, Zhurnalist, Moscow, No 10, Oct 1969,
pp 49-52.
JPRS 49494

Modern Azerbaydzhan Writer's Novels Reviewed,
by R. Rayeva, 5 pp.
RUSSIAN, np, Bakinskiy Rabochiy, Baku, 24 Oct
1969, p 3.
JPRS 49415

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ganda, by B. Lobovik, V. Chudnovskiy, 12 pp.
RUSSIAN, per, Kommunist Ukrainy, Kiev, Nov 1969,
pp 75-84.
JPRS 49577

Militia, Komsomol Combat Juvenile Delinquency,
by N. Vetrov, 7 pp.
RUSSIAN, np, Komsomol'skaya Pravda, Moscow,
19 Nov 1969, p 2.
JPRS 49415

Harmful Effects of Religion Described, by
N. Stasenko, 6 pp.
RUSSIAN, np, Krasnaya Zvezda, Moscow, 4 Dec 1969,
p 4.
JPRS 49536

Scientific, Technical Revolution Reviewed, by
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RUSSIAN, per, Novyy Mir, Moscow, 9 Sept 1969,
pp 261-265.
JPRS 49415

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RUSSIAN, per, Programmy Radio i Televideniya,
Moscow, 24 Nov-21 Dec 1969.
JPRS 49540

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Minsk, No 11, Nov 1969, pp 32-34.
JPRS 49548

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RUSSIAN, per, Sotsialisticheskaya Zakonnost',
Moscow, Sept 1969, pp 26-30.
JPRS 49339

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No 9, Sept 1969, pp 50-54.
JPRS 49335

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Nov 1969, pp 53-58.
JPRS 49536

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No 85, 31 Oct 1969, pp 1-2.
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5 Dec 1969, pp 1-2.
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BULGARIAN, np, Ikonomicheski Zhivot, Sofia,
16 Oct 1969, p 8.
JPRS 49380

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BULGARIAN, per, Khimiya i Industriya, Sofia, No 6,
Aug-Sept 1969, pp 251-254.
JPRS 49486

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Aug-Sept 1969, pp 258-260.
JPRS 49486

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Aug-Sept 1969, pp 266-269.
JPRS 49486

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Aug-Sept 1969, pp 273-276.
JPRS 49486

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Sept 1969, pp 8-10.
JPRS 49380

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1969, pp 3-13.
JPRS 49380

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1969, pp 2-5.
JPRS 49538

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1969, pp 2-5.
JPRS 49486

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1969, pp 8-14.
JPRS 49486

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No 10, Oct 1969, pp 297-299.
JPRS 49401

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CZECH, np, Hospodarske Noviny, Prague, 7 Nov
1969, p 4.
JPRS 49380

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CZECH, per, Hospodarske Noviny, Prague, 7 Nov 1969,
p 5.
JPRS 49380

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CZECH, np, Hospodarske Noviny, Prague, 7 Nov 1969,
p 12.
JPRS 49486

Analyzing Production Rate of Sinter Plants and
Its Possible Enhancement, by J. Hancil.
CZECH, per, Hutnik, Vol 19, No 7, 1969,
pp 243-247.
*BISI 7822

Launching Free-Machining Steel Production in
Large Open-hearth Steelmaking Plants in
Czechoslovakia, by J. Becvar.
CZECH, per, Hutnik, Vol 19, No 7, 1969,
pp 251-256.
*BISI 7824

Ten-Year Housing Construction Plan Noted, by
Alojz Velicky, 7 pp.
SLOVAK, np, Prace, Bratislava, 4 Dec 1969, p 4.
JPRS 49501

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CZECH, np, Prace, Prague, 4 Dec 1969, p 4.
JPRS 49501

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CZECH, per, Zahranicni Obchod, Prague, Oct 1969,
pp 23-27.
JPRS 49375

Marketing research of the fishing industry,
by K. Goben,
GERMAN, per, Allgemeine Fischwirtschafts-
zeitung (AFZ), Vol. 21, No. 33, 31 Oct. 69
pp. 38-44
*CPSTI TT 70-58020

Development, Mechanization of State Farms Praised,
by A. Spengler, 8 pp.
GERMAN, per, Deutsche Agrartechnik, East Berlin,
Oct 1969, pp 460-463.
JPRS 49538

East Berlin Freight Transport System Described,
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GERMAN, per, Deutsche Eisenbahntechnik, East Berlin,
Sept 1969, pp 428-432.
JPRS 49517

Article Lauds Progress of East German Railroad,
by Hubert Egemann, 6 pp.
GERMAN, per, Deutsche Eisenbahntechnik,
East Berlin, Oct 1969, pp 471-473.
JPRS 49401

East Berlin's Future City Traffic Plan
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GERMAN, per, Deutsche Eisenbahntechnik,
East Berlin, Oct 1969, pp 488-493.
JPRS 49401

Twenty Years' Rolling Stock Production Re-
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GERMAN, per, Deutsche Eisenbahntechnik,
East Berlin, Oct 1969, pp 522-526.
JPRS 49425

The Importance of District Heating from the
Viewpoint of the National Economy, by
K. Hencky.
GERMAN, per, Energie, Vol 11, July 1959,
pp 283-185.
CEGB/C.E. Trans 5196

Regulation on Handling Rare Metals Promulgated,
7 pp.
GERMAN, per, Gesetzblatt der Deutschen Demo-
kratischen Republik, East Berlin, Part 2, No 71,
26 Aug 1969, pp 450-452.
JPRS 49375

bloc Trade Agreements with Foreign Countries,
7 pp.
GERMAN, per, Marktinformationen, East Berlin,
No 45, 10 Nov 1969, p 3.
JPRS 49538

USSR Trade Representative Reviews GDR-USSR Trade,
by W. Klotschek, 8 pp.
GERMAN, per, Sozialistische Aussenwirtschaft, East
Berlin, Sept 1969, pp 9-13.
JPRS 49380

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GERMAN, per, Sozialistische Aussenwirtschaft,
East Berlin, Sept 1969, pp 14-18.
JPRS 49443

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GERMAN, per, Standardisierung, East Berlin, Sept
1969, pp 312-314.
JPRS 49486

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GERMAN, per, Die Technik, East Berlin, Oct 1969,
pp 667-670.
JPRS 49443

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GERMAN, per, Wasserwirtschaft-Wassertechnik,
East Berlin, Oct 1969, pp 343-348.
JPRS 49517

Railroad Faces Investment, Materials Problems,
5 pp.
GERMAN, np, Die Wirtschaft, East Berlin, 9 Oct
1969, p 13; Neues Deutschland, East Berlin, 12
Nov 1969, p 3.
JPRS 49538

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1969, pp 309-315.
JPRS 49496

Development of 1968 Earnings, Incomes Reviewed,
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HUNGARIAN, np, Figyelo, Budapest, 29 Oct 1969,
p 3.
JPRS 49380

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HUNGARIAN, per, Figyelo, Budapest, 21 Nov 1969,
pp 1-2.
JPRS 49538

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HUNGARIAN, per, Ipargazdasag, Budapest, Aug-Sept
1969, pp 1-5.
JPRS 49375

CEMA Countries' Cooperation Problems Discussed,
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HUNGARIAN, per, Tarsadalmi Szemle, Budapest, Nov
1969, pp 10-17.
JPRS 49538

Method of Determination of Daily Production
Costs and Optimum Load Dispatching in Elect-
rical Power Generating Systems, by
A. Przyliski.
POLISH, per, Biul Inst Energ, Vol 9, No 3-4,
1967, pp 17-23.
CEGB/C.E. Trans 5049

Fishery Management Investment Plan for 1968,
by F. Golebiowski, 12 pp.
POLISH, per, Biuletyn Zjednoczenia Gospodarki
Rybnej, Vol 5, No 4, (47), 1968, pp 11-16.
Dept of Inter
BCF/OFF
A-33/Nov 69/86
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Period 1964-1967, by L. Bleszczynski, 5 pp.
POLISH, per, Biuletyn Zjednoczenia Gospodarki
Rybnej, Vol 5, No 4(47), 1968, pp 24-26.
Dept of Inter
BCF/OFF
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1967 Fishing Figures (amended), 5 pp.
POLISH, per, Biuletyn Zjednoczenia Gospodarki
Rybnej, Vol 5, No 4(47), 1968, pp 27-29.
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BCF/OFF
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Countries, by H. Tetzlaff, 5 pp.
POLISH, per, Biuletyn Zjednoczenia Gospodarki
Rybnej, Vol 5, No 5(47), 1968, pp 4-7.
Dept of Inter
BCF/OFF
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Supply of the Domestic Market with Fishery Items
in 1967, 6 pp.
POLISH, per, Biuletyn Zjednoczenia Gospodarki
Rybnej, Vol 5, No 5(47), 1968, pp 27-30.
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Operating Time Account for the Fishing Fleet
in 1967. 11 pp.
POLISH, per, Biuletyn Zjednoczenia Gospodarki
Rybnej, Vol 5, No 5(47), 1968, pp 31-35.
Dept of Inter
BCF/OFF
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1969, pp 234-237.
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POLISH, per, Handel Zagraniczny, Warsaw,
No 9, 1969, pp 292-295.
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July-Aug 1969, pp 372-378.
JPRS 49496

The Development of Maritime Economy after the
Fourth Congress of the PZPR, by J. Burakiewicz.
POLISH, per, Technika i Gospodarka Morska,
Vol 18, No 10, 1968, pp 433-435.
Dept of Navy NIC Tran 2939

Scientific Management and Planning Methods
in Industrial Sea Fisheries, by
S. Lewenstein.
POLISH, per, Technika i Gospodarka Morska,
Vol. 19, No. 6 (216) June, 1969, pp.264-267
*CFSTI TT 70-55014

Conversion of the Trawler "Kwisa" into a
Trawler-Seiner and Possibilities of Staring
Ring-net Fishing in Polish Sea Fisheries, by
J. Strybel.
POLISH, per, Technika i Gospodarka Morska,
Vol. 19, No. 7 (217) July, 1969, pp. 298-301
*CFSTI TT 70-55017

State of Cod Resources in the Area of the
Fishery Convention on the Northwest Atlantic
(ICNAF), by E. Stanek.
POLISH, per, Technika i Gospodarka Morska,
Vol. 19, No. 8-9 (218-219), Aug.Sept.1969
pp. 381-384.
*CFSTI TT 70-55017

Politburo Surveys Economy's Technological
Progress, 76 pp.
POLISH, per, Trybuna Ludu, Warsaw, 16 Nov
1969, pp 3-5.
JPRS 49475

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by Jerzy Dzieciolowski, 8 pp.
POLISH, np, Zycie Gospodarcze, Warsaw, 30 Nov
1969, pp 1, 4.
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ROMANIAN, per, Buletinul Oficial, Bucharest,
Part I, No 108, 8 Oct 1969, pp 902-904.
JPRS 49375

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JPRS 49375

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1, No 108, 8 Oct 1969, pp 912-914.
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1, No 108, 8 Oct 1969, pp 915-917.
JPRS 49375

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Part 1, No 108, 8 Oct 1969, pp 918-920.
JPRS 49375

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12 pp.
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1, No 108, 8 Oct 1969, pp 921-923.
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Ministry of Light Industry Reorganized, 11 pp.
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1, No 108, 8 Oct 1969, pp 924-926.
JPRS 49375

Decree Issued on Organization of Ministry of Food
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Oct 1969, pp 976-979.
JPRS 49375

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Aug 1969, pp 369-372.
JPRS 49401

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Aug 1969, pp 377-381.
JPRS 49401

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Aug-Sept 1969, pp 422-424.
JPRS 49496

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Aug-Sept 1969, pp 467-472.
JPRS 49496

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Aug 1969, pp 245-251.
JPRS 49501

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ROMANIAN, per, Electrotehnica, Bucharest, July-
Aug 1969, pp 252-256.
JPRS 49501

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July 1969, pp 3-13.
JPRS 49375

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JPRS 49501

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JPRS 49501

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pp 1, 3.
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1969, pp 29-44.
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ROMANIAN, per, Metalurgia, Bucharest, Vol 21,
No 8, Aug 1969, pp 370-374.
JPRS 49401

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ROMANIAN, per, Probleme Economice, Bucharest,
Aug 1969, pp 46-63.
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JPRS 49391

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Belgrade, Nov 1969, pp 745-761.
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Belgrade, Nov 1969, pp 763-772.
JPRS 49486

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Pregled, Zagreb, No 9-10, 1969, pp 24-31.
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Nov 1969, pp 1522-1526.
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15 pp.
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Belgrade, Jul 1969, pp 244-250.
JPRS 49412

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SERBO-CROATIAN, per, Privredni Pregled,
Belgrade, 9 Nov 1969, p 13.
JPRS 49450

Problems of Employment Abroad Cited, by
Tomislav Mladenovic, 15 pp.
SERBO-CROATIAN, per, Problemi Spoljne
Trgovine i Konjunktura, Belgrade, No 2,
1969, pp 160-173.
JPRS 49425

Bank's Business in First Half of 1969 Described,
by Milovan Kuzmanovic, 10 pp.
SERBO-CROATIAN, per, Vesnik Jugoslovenske Invest-
icione Banke, Belgrade, July-Aug 1969, pp 1-5.
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Accumulative Capacity of Economic Enterprises
Discussed, by Predrag Mihailovic, 6 pp.
SERBO-CROATIAN, per, Vesnik Jugoslovenske Investi-
cione Banke, Belgrade, July-Aug 1969, pp 6-8.
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ALBANIAN, per, Zeri i Popullit, Tirana, 29 Oct
1969, pp 2-3.
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Writer Rejects Theory of 'Building Bridges', by
Georgi G. Dimitrov, 9 pp.
BULGARIAN, per, Naruchnik na Agitatora, Sofia,
No 20, Nov 1969, pp 44-52.
JPRS 49518

GDR Foreign Minister Discusses European
Security, 6 pp.
BULGARIAN, per, Rabotnichesko Delo, Sofia,
28 Nov 1969.
JPRS 49412

Party Policy Enforcement, Purge Discussed,
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CZECH, per, A Revue, Prague, No 20, 1969,
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1362.
JPRS 49495

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by Jan Fiala, 5 pp.
CZECH, per, Nova Mysl, Prague, Nov 1968,
pp 1390-1393.
JPRS 49334

Polacek Speaks to Trade Union Council Plenum,
25 pp.
CZECH, per, Prace, Prague, Special Supplement,
26 Nov 1969.
JPRS 49412

January 1968 Party Resolution Published, 9 pp.
CZECH, per, Tribuna, Prague, 15 Oct 1969,
pp 8-9.
JPRS 49334

Slovak Party Membership Situation Reviewed, by
Benedikt Varecka, 6 pp.
CZECH, np, Zivot Strany, Prague, 19 Nov 1969, p 7.
JPRS 49446

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CZECH, np, Zivot Strany, Prague, 26 Nov 1969,
p 10.
JPRS 49446

Vodslon, Dubcek, Bilak Address Central Committee,
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FRENCH, per, Politique Aujourd'hui, Paris, Nov
1969, pp 3-7.
JPRS 49518

Profile of General Major Goldbach Presented, 7 pp.
GERMAN, per, Armee-Rundschau, East Berlin, Sept
1969, pp 24-26, 28-29.
JPRS 49446

Coordination of LPGs in Cooperative Societies,
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GERMAN, per, Einheit, East Berlin, Aug 1969,
pp 953-964.
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Defense, by Heinz Hoffmann, 19 pp.
GERMAN, per, Einheit, East Berlin, Nov 1969,
pp 1323-1335.
JPRS 49454

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GERMAN, per, Einheit, East Berlin, Nov 1969,
pp 1355-1366.
JPRS 49454

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GERMAN, per, Neue Justiz, East Berlin, No 20,
Oct 1969, pp 625-630.
JPRS 49412

GDR Writer Comments on East-West German Ties,
by Joseph Scholmer, 10 pp.
GERMAN, np, Vorwaerts, Bonn, 6 Nov 1969,
p 3.
JPRS 49475

Eastern Europe
Political (Contd)

CP Writer Reviews Czechoslovak Situation, by
Franco Bertone, 6 pp.
ITALIAN, per, Rinascita, Rome, 5 Dec 1969, pp 10-
11.
JPRS 49542

New Composition of People's Councils Noted, by
Tadeusz Kolodziejczyk, 8 pp.
POLISH, np, Rada Narodowa, Warsaw, 1 Nov 1969,
pp 3, 4.
JPRS 49446

Polish CP Leader Greet Enver Hoxha on
Anniversary, 5 pp.
POLISH, rpt, Tirana Radio, 2130 GMT, 30 Nov
1969.
JPRS 49412

Szydlak Speech Marks Lenin Anniversary, 7 pp.
POLISH, per, Trybuna Ludu, Warsaw, 21 Nov 1969.
JPRS 49412

Ministers Rule on Workers' Training Courses,
9 pp.
ROMANIAN, per, Buletinul Oficial al Republicii
Socialiste Romania, Bucharest, Part 1, 6 Nov
1969, pp 2-4.
JPRS 49518

Social Educational Role of Party Discussed, by
Virgil Trofin, 18 pp.
ROMANIAN, per, Lupta de Clasa, Bucharest, Oct 1969,
pp 14-28.
JPRS 49495

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SERBO-CROATIAN, np, Vjesnik, Zagreb, 25 Nov
1969, p 9.
JPRS 49475

Swede Discusses Lessons of Czechoslovak Crisis,
by Karl Staf, 6 pp.
SWEDISH, np, Norrskensflamman, Lulea, 2 Dec 1969,
pp 4, 5; 3 Dec 1969, pp 4, 5.
JPRS 49542

Eastern Europe
Military

Army Ideological Training Changes Discussed,
by Podplukovnik Dr Stanislav Plasil, 7 pp.
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pp 6-8.
JPRS 49475

Nuclear Weapon Tests and Their Consequences,
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GERMAN, per, Militartechnik (Army), No 9, 1967,
pp 402-405.
AIR/FTD/HT-23-1308-68

Competence of GDR Military Courts Explained,
by Alfred Hartmann, 7 pp.
GERMAN, per, Neue Justiz, East Berlin, No 21,
Nov 1969, pp 664-666.
JPRS 49475

Operation "Clear Waters", by Zbigniew Damski,
11 pp.
POLISH, np, Zolnierz Wolnosci, 27 June 1969.
NAV/NIC/Tran-2946-69

Book Which Exposes German Militarism, by
A. Ivanov, 9 pp.
RUSSIAN, per, KOMMUNIST, Moscow, No 16, Nov 1969,
pp 123-127.
JPRS 49493

Civil-Military Wartime Medical Cooperation
Urged, by Borijov Vracaric,
Bozidar Pejuskovic, 10 pp.
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Belgrade, Sept 1969, pp 414-418.
JPRS 49412

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Belgrade, Sept 1969, pp 419-422.
JPRS 49412

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JPRS 49412

Eastern Europe
Sociological

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ALBANIAN, np, Sporti Popullor, Tirana, 16 Sept 1969, p 3.
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SLOVAK, per, Demografie, Prague, No 3, 1969, pp 214-215.
JPRS 49475

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GERMAN, np, National-Zeitung, East Berlin, 25 Oct 1969, p 3.
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ROMANIAN, per, Lupta de Clasa, Bucharest, Oct 1969, pp 62-86.
JPRS 49495

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RUMANIAN, per, Revista de Pedagogie, Bucharest, Sept 1969, pp 11-17.
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JPRS 49454

WESTERN EUROPE
Economic

The Use of Marginal Costs in an Investment Problem. Optimal Reactive Power Production in the French Network, by D. Calvet.
FRENCH, per, E.D.F. Bull de la Direction des Etudes et Recherches, Ser B, No 3, 1968, pp 23-43.
CEGB/C.E. Trans 5155

Hamburg, Its Present and Future. 6 pp.
GERMAN, per, Allgemeine Fischwirtschaftszeitung, Vol 21, No 27, Sept 1969, pp 3-4.
Dept of Inter
BCF/OFF
A-33/Nov 69/119
On Loan Only

Principal Technical and Economic Characteristics of the Hypersonic Civil Transport, by Vincenzo Correnti. 65 pp.
ITALIAN, rpt, Ric sul Volo Ipersonico del CNR, Part 3, 1967, 53 pp.
NASA TT F-12,470

Political

CP Goal to Expand Socialism in Finland, by Aarne Saarinen, 9 pp.
FINNISH, np, Kansan Uutiset, Helsinki, 23 Nov 1969, pp 1, 7.
JPRS 49483

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FINNISH, np, Kansan Uutiset, Helsinki, 24 Nov 1969, p 1.
JPRS 49421

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FRENCH, per, Cahiers de l'Institut Maurice Thorez, Paris, 3rd quarter 1969, pp 21-37.
JPRS 49444

CP Holds Conference on Unity of the Left, 19 pp.
FRENCH, per, Le Drapeau Rouge, Brussels, 21 Nov 1969, pp 3, 10-12, 14.
JPRS 49433

CP Writer Appraises Communist China, by
Georges Girard, 9 pp.
FRENCH, per, France Nouvelle, Paris, 1 Oct 1969,
pp 10-11.
JPRS 49395

Waldeck Rochet Speech Read at Strasbourg Rally,
by Waldeck Rochet, 10 pp.
FRENCH, np, L'Humanite, Paris, 17 Nov 1969, p 2
JPRS 49395

Marchais Discusses CP Stand on Unity Question,
5 pp.
FRENCH, np, L'Humanite, Paris, 24 Nov 1969,
p 4.
JPRS 49421

Party Militant Discusses Stalinism in CP, by
Claude Lagarde, 8 pp.
FRENCH, per, Politique Aujourd'hui, Paris, Nov
1969, pp 113-114, 116-118.
JPRS 49483

PSU Calls for Creation of New Revolutionary
Party, 6 pp.
FRENCH, per, Tribune Socialiste, Paris,
6 Nov 1969, pp 6-8.
JPRS 49433

Expelled Communist Airs Views on Modern Parties,
by Ernst Fischer, 5 pp.
GERMAN, np, Stern, Hamburg, 30 Nov 1969, pp 142,
144.
JPRS 49502

Situation in West Germany After Election Described,
6 pp.
GERMAN, np, Unsere Zeit, Essen, 23 Oct 1969, p 34.
JPRS 49483

Political Situation After Election and West Ger-
man CP's Next Tasks, by Kurt Bachmann, 27 pp.
GERMAN, per, Unsere Zeit, Essen, 23 Oct 1969,
pp 35-40.
JPRS 49483

Documentation on Ernst Fischer Case Presented,
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GERMAN, per, Volksstimme, Vienna, 30 Oct 1969,
pp 4-6.
JPRS 49433

CP Central Committee Deals with Youth Problem,
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GERMAN, per, Volksstimme, Vienna, 6 Nov 1969,
pp 4-5.
JPRS 49433

Swiss Communist Attacks Convergence Theory as
Bourgeois, by Hermann Loiser, 6 pp.
GERMAN, np, Vorwaerts, Basel, 30 Oct 1969,
p 9.
JPRS 49433

Liberal Communist Reflects on Moscow Conference,
by Franz Marekic, 13 pp.
GERMAN, per, Wiener Tagebuch, Vienna, No 1/2,
July/Aug 1969, pp 33-34.
JPRS 49502

Italian CP Expels 'New Left' Leaders in Surprise
Move, 5 pp.
ITALIAN, np, L'Espresso, Rome, 23 Nov 1969, p 2.
JPRS 49542

Ousted Communist Group Discusses Plans and Ideas,
by Lucio Magri, Aldo Natoli, 9 pp.
ITALIAN, np, L'Espresso, Rome, 7 Dec 1969, pp 14-
15.
JPRS 49542

Italian CP Rejects Stalinist Concept of
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ITALIAN, np, Rinascita, Rome, 31 Oct 1969,
pp 24, 25.
JPRS 49330

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ITALIAN, per, Rinascita, Rome, 28 Nov 1969, pp 25-
26.
JPRS 49483

Il Manifesto Affair Reviewed by Macaluso, by
Emanuele Macaluso, 6 pp.
ITALIAN, np, Rinascita, Rome, 5 Dec 1969, p 7.
JPRS 49542

M-1 Party Lists Failures; Urges Correction, 8 pp.
ITALIAN, per, Rivoluzione Proletaria, Milan, Oct-
Nov 1969, pp 1, 2.
JPRS 49502

Western Europe
Political (Contd)

Luigi Longo: Out Struggle on Italian Path to Socialism, 5 pp.
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CP Paper Reports on 'Mediterranean 70' Convention, by Giorgio Frasca Polara, 5 pp.
ITALIAN, np, l'Unita, Rome, 24 Nov 1969.
JPRS 49421

Italian Communist Newspaper Scored for Factionalism, 13 pp.
ITALIAN, np, l'Unita, Rome, 26 Nov 1969, p 4.
JPRS 49444

CP Debates Natta Report on Manifesto Issue, 50 pp.
ITALIAN, per, l'Unita, Rome, 27 Nov 1969, pp 9-11.
JPRS 49542

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ITALIAN, np, l'Unita, Rome, 28 Nov 1969, p 4.
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ITALIAN, np, l'Unita, Rome, 6 Dec 1969, p 3.
JPRS 49542

Significance of Recent Election Discussed, by Reidar T. Larsen, 13 pp.
NORWEGIAN, np, Friheten, Oslo, 13-18 Oct 1969, p 16, 20-25 Oct 1969, p 16; 27 Oct-1 Nov 1969, p 16.
JPRS 49330

Farm Workers Conference Voices Demands, by Pedro Mendez, 6 pp.
SPANISH, per, Espana Republicana, Havana, 1 Nov 1969, pp 3, 10.
JPRS 49483

Military

The Main Battle Tank 70. 5 pp.
DUTCH, per, de Militaire Spectator, No 10, 1968, pp 457-459.
ACSI-J-7430

AFRICA
Economic

Algeria Reports Higher Industrial Output Since Nationalization, by al-Akhdar Darhani, 6pp.
ARABIC, per, al-Mujahid, Algiers, 2 Nov 1969, pp 28-33.
JPRS 49436

Algeria Introduces Price Controls to Curb Profiteering, by Ayid'Abd ar-Rahman, 5 pp.
ARABIC, per, al-Mujahid, Algiers, 16 Nov 1969, pp 14-15.
JPRS 49534

Government Housing Achievements, Future Plans, by Othman Gharbi, 15 pp.
FRENCH, per, L'Action, Tunis, 28 Oct 1969, pp 4-5.
JPRS 49343

Increase in 1970 General Budget Approved, 5 pp.
FRENCH, per, Bulletin de l'Afrique Noire, Paris, 26 Nov 1969, pp 11616-11618.
JPRS 49473

Speech Inaugurating Boke Industrial Complex, by Lansana Beavogui, 14 pp.
FRENCH, per, Horoya-Hebdo, Conakry, 18-24 Oct 1969, pp 11-24.
JPRS 49338

Agriculture, Industry, Demography, Trade Studied, 9 pp.
FRENCH, per, Informations d'Outre-Mer, Paris, Oct 1969, pp 1-10.
JPRS 49452

Drop in African Lumber Exports Reported, 5 pp.
FRENCH, np, Le Moniteur Africain, Dakar, 13 Nov 1969, p 11.
JPRS 49490

Soviet Aid Seen as Also Having Ulterior Motives, 5 pp.
FRENCH, np, Le Moniteur Africain, Dakar, 20 Nov 1969, p 11.
JPRS 49452

National Economy, National Elections Discussed, 5 pp.
FRENCH, np, Moniteur Africain, Dakar, 27 Nov 1969, p 9.
JPRS 49534

Africa
Economic (Contd)

African-EEC Trade in 1968 Small but Favorable, 6 pp.
FRENCH, np, Le Moniteur Africain, Dakar, 27 Nov 1969, p 11.
JPRS 49473

Link Between Monetary System, Growth Considered, by Gaston Leduc, 14 pp.
FRENCH, per, Revue Francaise d'Etudes Politiques Africaines, Paris, Nov 1969, pp 61-74.
JPRS 49534

Prospects for Central African River Fleet, by G. B., 7 pp.
FRENCH, per, La Vie du Rail Outre-Mer, Paris, Nov 1969, pp 25-29.
JPRS 49390

Advance of Canary Island Road Network Studies, by Jose Mateo Diaz, 8 pp.
SPANISH, per, AEC (Supplement), Madrid, 30 Nov 1969, pp 20-23.
JPRS 49473

Political

Objectives of Leftist Eritrean Revolution Outlined, by Nabil Badawi, 7 pp.
ARABIC, np, Al-Bath, Damascus, 1 Sept 1969, p 3.
JPRS 49452

Libya Revolution Leader Pledges Undying Dedication to People, by Mustafa Nabil, 8 pp.
ARABIC, per, al-Musawwar, Cairo, 24 Oct 1969, pp 7-11.
JPRS 49473

No Alternative Seen to Tombalbaye Despite Rebellion, by Etienne Mallarde, 18 pp.
FRENCH, per, Combat, Paris, 20 Oct 1969, pp 8-9; 21 Oct 1969, p 10; 23 Oct 1969, p 10.
JPRS 49343

National Cohesion and Class Struggle Examined, by Mamadi Keita, 13 pp.
FRENCH, per, Horoya-Hebdo, Conakry, 11-17 Oct 1969, pp 3-17.
JPRS 49338

Africa
Political (Contd)

Party Cadre School Graduation Reported, 8 pp.
FRENCH, per, Horoya-Hebdo, Conakry, 18-24 Oct 1969, pp 3-10.
JPRS 49338

Revolutionary Theory, Practice Examined, by Alpha Taran Diallo, 23 pp.
FRENCH, per, Horoya-Hebdo, Conakry, 8-14 Nov 1969, pp 3-15; 22-28 Nov 1969, pp 3-18.
JPRS 49490

Duties, Importance of Class Struggle Stressed, 5 pp.
FRENCH, per, Horoya-Hebdo, Conakry, 8-14 Nov 1969, pp 2, 29-31.
JPRS 49490

President Defines Role of Guinean Diplomats, 10 pp.
FRENCH, per, Horoya-Hebdo, Conakry, 15-21 Nov 1969, pp 19-29.
JPRS 49473

Regulations Issued for National Guard, Police, 15 pp.
FRENCH, per, Journal Officiel de la Republique Rwandaise, Kigali, 15 Jul 1969, pp 188-192.
JPRS 49452

Mauritian Militant Movement Urges Unity, Change, by Paul R. Berenger, 5 pp.
FRENCH, np, Le Mauricien, Port Louis, 30 Sept 1969, pp 1, 3.
JPRS 49436

French Writer Analyzes African Political Scene, by Gilbert Comte, 6 pp.
FRENCH, np, Le Monde, Paris, 12 Nov 1969, pp 1, 6.
JPRS 49390

CAU Said to be Entering Critical Period, by Gilbert Comte, 5 pp.
FRENCH, per, Le Monde Diplomatique, Paris, Oct 1969, p 15.
JPRS 49338

Military Keeps Some Control Over New Government, by Philippe Decraene, 5 pp.
FRENCH, per, Le Monde Diplomatique, Paris, Oct 1969, p 15.
JPRS 49338

Chad Government Facing Serious Security Problems,
by Philippe Decraene, 7 pp.
FRENCH, per, Le Monde Diplomatique, Paris, Nov
1969, p 5.
JPRS 49436

Development Aided by Political Stability, 5 pp.
FRENCH, np, Moniteur Africain, Dakar, 16 Oct 1969,
p 8.
JPRS 49436

Last Year's Developments Reviewed, 9 pp.
FRENCH, per, El Moudjahid, Algiers, 26-27 Oct
1969, p 5.
JPRS 49390

Activities at Chercbell Interarms Academy,
by Ahmed Larbi, 7 pp.
FRENCH, per, El Moudjahid, Algiers, 16-17 Nov
1969, p 3.
JPRS 49473

Nature, Implications of Libyan Coup Assessed,
by Albert-Paul Lentin, 15 pp.
FRENCH, per, Politique Aujourd'hui, Paris, Nov
1969, pp 27-37.
JPRS 49490

Progress Report on Nationalist Movement
Unification, by Andre Makenda, 12 pp.
FRENCH, per, Remarques Africaines, Brussels,
20 Nov 1969, pp 494-501.
JPRS 49452

New Efforts Made to Form Single Political
Party, by Eric Makedonsky, 6 pp.
FRENCH, per, Revue Francaise d'Etudes
Politiques Africaines, Paris, Sept 1969,
pp 62-72.
JPRS 49338

Island Solutions to Political Problems Reviewed,
by Louis Favoreu, 8 pp.
FRENCH, per, Revue Juridique et Politique, Paris,
July-Sept 1969, pp 305,310-318.
JPRS 49436

Micombero Speech Opening Ideological Seminar,
7 pp.
FRENCH, per, Unité et Revolution, Bujumbura,
20 Sept 1969, pp 2-3.
JPRS 49452

Post-Revolutionary Situation in South Sudan
Assessed, by Hainer Winkler, 7 pp.
GERMAN, per, Horizont, East Berlin, No 45, Nov
1969, pp 16-17.
JPRS 49436

Sociological

Government to Erase Colonial Stigma From
Algiers University, 5 pp.
ARABIC, per, al-Mujahid, Algiers, 16 Nov 1969,
pp 4-5.
JPRS 49534

Algeria Strives to Make Bedouins Pursue
Sedentary Life, by Muhammad al-Akhdar, 9 pp.
ARABIC, per, al-Mujahid, Algiers, 16 Nov 1969,
pp 10-13.
JPRS 49534

Education Minister Speaks on Education Reform,
by Assane Seck, 16 pp.
FRENCH, np, Dakar-Matin, Dakar, 18 Oct 1969, pp 1,
7; 20 Oct 1969, p 4.
JPRS 49436

Native Languages Suggested for African Education,
by J. Champion, 6 pp.
FRENCH, np, Le Monde, Paris, 3 Dec 1969, pp 1, 11.
JPRS 49490

MIDDLE EAST
Economic

Iraq's News Agency Celebrates Tenth Anniversary,
Reports Expansion Plan, 5 pp.
ARABIC, np, Al-Thawrah, Baghdad, 9 Nov 1969,
p 5.
JPRS 49453

Review of French-Arabian Peninsula Trade Relations,
by Guy Girod, 5 pp.
FRENCH, np, Commerce du Levant, Beirut, 22 Oct
1969, p 1.
JPRS 49526

Foreign Banks in Greece Aid Economic Development, 9 pp.
GREEK, np, To Vima, Athens, 25 Sept 1969, p 7; 26 Sept 1969, p 7; 27 Sept 1969, p 7; 28 Sept 1969, p 15; 30 Sept 1969, p 7; 2 Oct 1969, p 7.
JPRS 49423

Highway Will Present New Vistas in Sinai, by Menahem Talmi, 5 pp.
HEBREW, per, Maariv, Tel Aviv, 14 Nov 1969, pp 25, 33.
JPRS 49423

Freezing and Canning Fishery Products in the UAR, by Mustafa Ramadan.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 11, 1969, pp 89-90.
*Dept of Inter
BCF/OFF
*CFSTI TT 69-59000/11

Political

Seminar Discusses Problems of Egyptian Diplomacy, 55 pp.
ARABIC, np, Al-Ahram, Cairo, 26 Sept 1969, pp 9, 15; 27 Sept 1969, p 7; 28 Sept 1969, p 5; 29 Sept 1969, p 5; 30 Sept 1969, p 5; 1 Oct 1969, p 5; 2 Oct 1969, p 5; 3 Oct 1969, p 9; 4 Oct 1969, p 5.
JPRS 49487

UAR Leftist Sees USSR Support for Fedayeen, by Lutfi al-Khuli, 6 pp.
ARABIC, np, Al-Ahram, Cairo, 4 Nov 1969, p 5.
JPRS 49487

Egypt Ratifies Arab Joint Broadcast Agreement, 15 pp.
ARABIC, per, al-Jaridah al-Rasmiyah, Cairo, 21 Aug 1969, pp 653-659.
JPRS 49526

Soviet Policy Shifts to Support of Palestinian Resistance, by Sami Da'ud, 5 pp.
ARABIC, np, al-Jumhuriyah, Cairo, 2 Nov 1969, p 12.
JPRS 49382

Arabs Urged to Support Commandos in Lebanon, by A. Sujal, 5 pp.
ARABIC, per, al-Mujahid, Algiers, 26 Oct 1969, pp 18-19.
JPRS 49343

Regulations Tighten Alexandria Port Security, by Hasan Ahmad Sandid, 19 pp.
ARABIC, per, Al-Waqa'i' al-Misriyyah, Cairo, 8 Oct 1969, pp 2-9.
JPRS 49388

General Iordanidis Manifesto on New Greece, by Serge Mallet, 8 pp.
FRENCH, per, Tribune Socialiste, Paris, 16 Oct 1969, pp 16-17.
JPRS 49453

Khalid Bakdash, Syrian CP Chief Interviewed, by Hellmuth Leonhardt, 7 pp.
GERMAN, per, Horizont, East Berlin, No 48, Nov 1969, pp 14-15.
JPRS 49526

Rakah Champions USSR as Mideast Peace Maker, by Meir Wilner, 5 pp.
HEBREW, np, Zo Haderekh, Tel Aviv, 12 Nov 1969, pp 1, 5.
JPRS 49487

Wilner Reiterates Party Goal of Political Solution in Mid-east, by Meir Wilner, 9 pp.
HEBREW, np, Zo Haderekh, Tel Aviv, 19 Nov 1969, p 4.
JPRS 49512

Rakah Increases Opposition to Annexation, 7 pp.
HEBREW, np, Zo Haderekh, Tel Aviv, 19 Nov 1969, p 5.
JPRS 49512

The Arab East on a New Path, by V. Rumyantsev, 16 pp.
RUSSIAN, per, Kommunist, Moscow, No 16, No v 1969, pp 90-101.
JPRS 49493

Reformist Trends in Modern Islam Analyzed, by V. Basilov, 13 pp.
RUSSIAN, per, Politicheskoye Samooobrazovaniye, Moscow, Oct 1969, pp 92-99.
JPRS 49514

Middle East
Military

Nahal Would Establish Permanent Frontier Settlements, 6 pp.
HEBREW, per, Bamahaneh, Tel Aviv, 4 Nov 1969, pp 8-9.
JPRS 49423

Sociological

Elementary Education in the Israeli Defense Forces, by Aharon Oppenheimer, 155 pp.
HEBREW, bk, No Foreign Title Given, Sept/Oct 1969.
JPRS 49416

Iranian Universities, Key Faculty Members Listed, by Alfonun, 11 pp.
PERSIAN, np, Tehran Mosavvar, Tehran, 5 Nov 1969, p 6.
JPRS 49512

FAR EAST

Economic

Communist China's Transportation, Communications Analyzed, by Chiang Huai, 18 pp.
CHINESE, np, Fei-ch'ing Yueh-pao, Taipei, 1 Sept 1969, pp 71-73, 81; 1 Oct 1969, pp 84-87.
JPRS 49478

Coal Industry of Communist China Surveyed, by Yin Ting-kuo, 24 pp.
CHINESE, per, Fei Ch'ing Yeh Pao, Taipei, Vol 12, No 8, 1 Oct 1969, pp 67-75.
JPRS 49532

A Commune-run Plant Which Follows Closely the Socialist Orientation. 5 pp.
CHINESE, per, Hung-ch'i, No 12, 29 Nov 1969.
China Mainland Magazines
31 Dec 1969
No 670

Far East
Economic (Contd)

Advanced Experience of Six Factories and Two Schools Bears Fruit Extensively in the Capital and Pushes Forward Development of Mass Movement of Struggle-criticism-transformation Vigorously. 5 pp.
CHINESE, np, Jen-min Jih-pao, 21 Dec 1969.
Survey of China Mainland Press
6 Jan 1970
No 4570

Mass Movement on Industrial Front Has Endless Power.
CHINESE, np, Jen-min Jih-pao, 28 Dec 1969.
Survey of China Mainland Press
6 Jan 1970
No 4570

Modern Commercial Fishing as Exemplified by the Japanese Industry, by Yu. Yu. Marti.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1968, pp 765-770.
Dept of Inter
BCF/OFF
A-33/Nov 69/55
On Loan Only

Increase Technical Management in Light Industry, by Luong Ngoc Khue, 5 pp.
VIETNAMESE, per, Ky Thuat Cong Nghiep Nhe, Hanoi, No 1, Feb 1969, pp 3-5.
JPRS 49500

1969 Technical Tasks Set for Salt Industry, by Le Hoa, 7 pp.
VIETNAMESE, per, Ky Thuat Cong Nghiep Nhe, Hanoi, No 1, Feb 1969, pp 5-9.
JPRS 49500

Mechanize Preparatory Work in Handicraft Weaving, by Mai Hong, 6 pp.
VIETNAMESE, per, Ky Thuat Cong Nghiep Nhe, Hanoi, No 1, Feb 1969, pp 14-16.
JPRS 49500

1985 Salt Production Goals Set at Three Million Tons Annually, by Le Hoa, 8 pp.
VIETNAMESE, per, Ky Thuat Cong Nghiep Nhe, Hanoi, No 3, June 1969, pp 1-4.
JPRS 49527

Afforestation Plan to be Launched in Memory of Ho, by Nguyen Tao, 5 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 1 Nov 1969, p 2.
JPRS 49427

Hanoi Sees Vietnam War as Basis of U. S. Fiscal Troubles, by Pham Thanh Vinh, 5 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 11 Nov 1969, p JPRS 49489

Water Conservancy Goals for 1970 Listed, by Ha Ke Tan, 6 pp.
VIETNAMESE, np, Quan Doi Nhan Dan, Hanoi, 1 Nov 1969, p 3.
JPRS 49427

Political

Monsters, Demons Found Among Communist Leaders, 8 pp.
CHINESE, np, Hing-ao Jih-pao, Hong Kong, 20 Oct 1969, p 2; 22 Oct 1969, p 2.
JPRS 49379

Exposing the Criminal Scheme Behind Lui Shao-ch'i's Opposition to Investigation and Study, by Ch'i Chien-t'ung, 6 pp.
CHINESE, np, Kuang-ming Jih-pao, 27 Dec 1969.
Survey of China Mainland Press
6 Jan 1970
No 4570

Communist Dissidents Urge Fair Look at China, by Jacques Courtois, 5 pp.
FRENCH, per, Unir-Debat, Paris, 10 Oct 1969, pp 2-3.
JPRS 49421

Women Urged to Revolutionize and Transform Themselves, by Kim Song-ae, 22 pp.
KOREAN, per, Kulloja, P'yongyang, 5 Oct 1969, pp 35-47.
JPRS 49456

Kim Il-Song's Theory is the Party's Guiding Policy, by Kim Kuk-chin, 18 pp.
KOREAN, per, Kulloja, P'yongyang, 5 Oct 1969, pp 48-57.
JPRS 49456

American Imperialism is to Bear the Brunt of Struggle, 14 pp.
KOREAN, per, Kulloja, P'yongyang, 5 Oct 1969, pp 58-64.
JPRS 49456

Outline of Party Ideological Work Given, by Ts. Dugersuren, 23 pp.
MONGOLIAN, per, Naryn Am'dral, Ulan Bator, No 2, 1969, pp 3-20.
JPRS 49336

Aleksandr Serbin of Ogonek Visits Nhan Dan, by Aleksandr Serbin, 6 pp.
RUSSIAN, per, Zhurnalists, Moscow, Oct 1969, pp 65, 68.
JPRS 49333

Resolutely Surge forward to Carry Out President Ho's Will by All Means, 8 pp.
VIETNAMESE, per, Hoc Tap, Hanoi, No 10, Oct 1969, pp 1-8.
JPRS 49551

Directive of the Political Bureau of the Party Central Committee on the Political Activity Drive to Study and Comply with President Ho's Will, 5 pp.
VIETNAMESE, per, Hoc Tap, Hanoi, No 10, Oct 1969, pp 9-13.
JPRS 49551

Speech Delivered by Truong Chinh, Chairman of the Standing Committee of the National Assembly, at the National Assembly Meeting in Memory of President Ho, 9 pp.
VIETNAMESE, per, Hoc Tap, Hanoi, No 10, Oct 1969, pp 14-19.
JPRS 49551

President Ho's Will, a Historic Document, 7 pp.
VIETNAMESE, per, Hoc Tap, Hanoi, No 10, Oct 1969, pp 29-34.
JPRS 49551

President Ho Speaking About the Chief Tasks of all Our Party and People at the Present Time, 17 pp.
VIETNAMESE, per, Hoc Tap, Hanoi, No 10, Oct 1969, pp 35-52.
JPRS 49551

Entire World Mourns President Ho Chi Minh, 25 pp.
VIETNAMESE, per, Hoc Tap, Hanoi, No 10, Oct 1969, pp 53-75.
JPRS 49551

Warmly Salute the Twentieth Birthday of the Peoples' Republic of China, by Ngo Minh Loan, 8 pp.
VIETNAMESE, per, Hoc Tap, Hanoi, No 10, Oct 1969, pp 76-82.
JPRS 49551

The German Democratic Republic on its Way to Successful Building of Socialism, by Do Va. Suu, 9 pp.
VIETNAMESE, per, Hoc Tap, Hanoi, No 10, Oct 1969, pp 83-89.
JPRS 49551

1954-1960 Violations of Geneva Agreements Cited, by Hoang Vi Nam, 33pp.
VIETNAMESE, per, Nghien Cuu lich Su, Hanoi, No 124, July 1969, pp 3-18.
JPRS 49387

Effects of Guerrilla War in South Vietnam Shown, by Tran Van Giau, 29 pp.
VIETNAMESE, per, Nghien Cuu lich Su, Hanoi, No 124, July 1969, pp 19-32.
JPRS 49387

Editorial Imbues Patriotism Through History, Memory of Ho, 6 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 1 Nov 1969, pp 1, 3.
JPRS 49427

District Leaps Ahead After Reversing Downward Trend, by Phan Quang, Vu Cam, 16 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 3, 4, 5, Nov 1969, p 2.
JPRS 49386

Problems of Unity Plague Nam Ha Provincial Party After Merger, by Phan Dien, 6 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 9 Nov 1969, p 2.
JPRS 49482

NVN Uses Cambodia National Day to Voice Friendship, Border Integrity, by Nguyen Thuong, 5 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 9 Nov 1969, p 4.
JPRS 49482

Culture is Equated with Communism, Patriotism, Hate U.S., by Hoang Minh Giam, 5 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 10 Nov 1969, pp 3, 4.
JPRS 49482

Hanoi Movie Industry Good, but Seen Lacking Ideology, by Xuan Truong, 9 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 15 Nov 1969, p 3.
JPRS 49489

Motives, Methods Important in Criticism, by Quang Hong, 6 pp.
VIETNAMESE, per, Nhan Dan, Hanoi, 20 Nov 1969, p 3.
JPRS 49558

Party Strengthens Militia in Mountain Zone, by Duc Duan, 5 pp.
VIETNAMESE, np, Quan doi Nhan Dan, Hanoi, 10 Nov 1969, p 2.
JPRS 49489

Worker's Movement, Labor Union Discussed, by Le Duc Tho, 27 pp.
VIETNAMESE, per, Tang Cuong Van Dong Cong Nhan va Boat Dong cua Cong Doan t... g Thin Hien Hien Nay, Hanoi, 1969.
JPRS/L 3227

Directive of the Political Bureau, Party Central Committee on the Period of Political Activity for Studying and Complying with the Will of President Ho, 5 pp.
VIETNAMESE, per, Tuyen Huan, Hanoi, No 10, Oct 1969, pp 1-3.
JPRS 49572

Entire Party, all the People, and Whole Heroic Army Advance, 9 pp.
VIETNAMESE, per, Tuyen Huan, Hanoi, No 10, Oct 1969, pp 9-14.
JPRS 49572

Doing Well in the Period of Political Activity Devoted to the Study of and Compliance with President Ho's Will, 13 pp.
VIETNAMESE, per, Tuyen Huan, Hanoi, No 10, Oct 1969, pp 15-22.
JPRS 49572

Guidelines for the Ideological Program in the Present Situation, by To Huu, 13 pp.
VIETNAMESE, per, Tuyen Huan, Hanoi, No 10, Oct 1969, pp 23-32.
JPRS 49572

Exchange Experiences Concerning Propaganda in Support of Agricultural Production: Some Experiences in Thai Binh Province, by Nguyen The Ky, 10 pp.
VIETNAMESE, per, Tuyen Huan, Hanoi, No 10, Oct 1969, pp 33-40.
JPRS 49572

Duyen Ha District Attaches Importance to Propaganda in Production, by Pham Van Thanh, 8 pp.
VIETNAMESE, per, Tuyen Huan, Hanoi, No 10, Oct 1969, pp 41-47.
JPRS 49572

Military

Triumphantly Advancing Along Chairman Mao's Line of Army Building. 7 pp.
CHINESE, per, Hung-ch'i, No 12, 29 Nov 1969.
China Mainland Magazines
31 Dec 1969
No 670

Two Basically Antagonistic Concepts of War, by Hung Ch'eng. 10 pp.
CHINESE, np, Jen-min Jih-pao, 24 Dec 1969.
Survey of China Mainland Press
8 Jan 1970
No 4572

VC Engagements with Allied Forces Recounted, 5 pp.
VIETNAMESE, np, Quan Doi Nhan Dan, Hanoi, 26 Oct 1969, p 2.
JPRS 49427

Combat Photography Grows in Excellence, by Nguyen Huy Hoang, 6 pp.
VIETNAMESE, per, Van Nghe Quan Doi, Hanoi, Aug 1969, pp 122-126.
JPRS 49386

Coming From Life, But Higher than Life. 7 pp.
CHINESE, per, Hung-ch'i, No 12, 29 Nov 1969.
China Mainland Magazines
31 Dec 1969
No 670

The Road of Regeneration Through One's Own Efforts Grows Broader and Broader. 5 pp.
CHINESE, per, Hung-ch'i, No 12, 29 Nov 1969.
China Mainland Magazines
31 Dec 1969
No 670

More Thorough Education for Young People Urged, 8 pp.
KOREAN, np, Nodong Ch'ongnyon, P'yongyang, 15 Oct 1969, p 1.
JPRS 49413

Ideas of Improving Teaching of Literature Told, by Ta Phong Chau, 22 pp.
VIETNAMESE, per, Nghien Cuu Giao Duc, Hanoi, No 2, Sept 1969, pp 36-45, 51.
JPRS 49523

Education Mourns Passing of Ho Chi Minh, by Nguyen Van Huyen, 5 pp.
VIETNAMESE, per, Nghien Cuu Giao Duc, Hanoi, No 3, Sept 1969, pp 14-15, 63.
JPRS 49523

Closer Student-Teacher Relationship Emphasized, 5 pp.
VIETNAMESE, per, Nghien Cuu Giao Duc, Hanoi, 3 Sept 1969, pp 16-17, 62.
JPRS 49466

Education's Tasks for 1969-1970 School Year Told, 7 pp.
VIETNAMESE, per, Nghien Cuu Giao Duc, Hanoi, No 3, Sept 1969, pp 18-20.
JPRS 49523

Improving Quality of Education Emphasized, by Le Liem, 18 pp.
VIETNAMESE, per, Nghien Cuu Giao Duc, Hanoi, No 3, Sept 1969, pp 21-28, 35.
JPRS 49523

Education Urged to Create Totally Developed Man, by Na The Ngu, 13 pp.
VIETNAMESE, per, Nghien Cuu Giao Duc, Hanoi, No 3, Sept 1969, pp 29-35.
JPRS 49523

Understanding Study Motives, Behavior Urged,
by Duc Minh, 12 pp.
VIETNAMESE, per, Nghien Cuu Giao Duc, Hanoi, No 3,
Sept 1969, pp 46-51.
JPRS 49523

Viet Ethnological Characteristics Studied, by
Nguyen Dinh Khoa, 8 pp.
VIETNAMESE, per, Nghien Cuu Lich Su, Hanoi, No
113, Aug 1968, pp 52-55.
JPRS 49552

Vietnamese-Muong Ethnic Relationship Studied,
by Nguyen Dinh Khoa, 12 pp.
VIETNAMESE, per, Nghien Cuu Lich Su, Hanoi, No
125, Aug 1969, pp 47-56.
JPRS 49552

Schools, Colleges Told to Live Up to Ho's
Expectations, by Ta Quang Duu, 5 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 26 Oct 1969,
p 3.
JPRS 49333

Association of Vietnamese Motion Picture Artists
Founded, by Hq Huy Giap, 5 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 19 Nov 1969, p 4.
JPRS 49527

Colleges Urged to Enforce Research Regulations,
by Le Thac Can, 12 pp.
VIETNAMESE, per, Tin Tuc Hoat Dong Khoa Hoc,
Hanoi, No 7, 1969, pp 9-14.
JPRS 49428

Mass Culture, Arts Continue in War Time, by
Xuan Thiem, 6 pp.
VIETNAMESE, per, Van Nghe Quan Doi, Hanoi, Aug
1969, pp 113-117.
JPRS 49386

Zone 4 Psywar Entertainment Group Described, by
Huy So, 6 pp.
VIETNAMESE, per, Van Nghe Quan Doi, Hanoi, Aug
1969, pp 118-121.
JPRS 49385

LATIN AMERICA
Economic

Cuban Economic Growth After 10 Years of Revolution,
9 pp.
SPANISH, per, Bohemia, Havana, 17 Oct 1969, pp 52-56.
JPRS 49499

Sugar-Processing Problems Explained, 6 pp.
SPANISH, per, Bohemia, Havana, 7 Nov 1969,
pp 49-53.
JPRS 49459

Finance Minister Reports on Five Basic Problems,
by Luis Hernandez Parker, 7 pp.
SPANISH, per, Excilla, Santiago Chile, 12-18
Nov 1969, pp 8-10.
JPRS 49439

Poverty Conditions in Latin America Examined,
by Dom Frago, 8 pp.
SPANISH, per, Mensaje, Santiago, Nov 1969,
pp 584-586.
JPRS 49403

Editor Opposes Hasty Signing of Copper Contract,
by F. Igartua, 5 pp.
SPANISH, np, Oiga, Lima, 21 Nov 1969, pp 7, 8.
JPRS 49499

Velasco Urges Firm Latin Copper Export
Policy, 6 pp.
SPANISH, per, Oiga, Lima, 28 Nov 1969,
pp 8-10.
JPRS 49535

Political

Dom Avelar Brandao Queried on Current Affairs,
by Mendoca Neto, Gilberto do Vale, 6 pp.
PORTUGUESE, per, O Cruzeiro, Rio de Janeiro,
4 Dec 1969, pp 104-106.
JPRS 49535

Jorge Batlle Addresses Unity-Reform Meeting,
11 pp.
SPANISH, per, Accion, Montevideo, 28 Nov 1969,
pp 3-4.
JPRS 49520

General Ovando Discusses Revolutionary Policy,
6 pp.
SPANISH, per, Bohemia, Caracas, 7 Dec 1969,
pp 22-25.
JPRS 49499

Arrest of Anticomunist Businessman Discussed,
7 pp.
SPANISH, per, Caretas, Lima, 27 Oct-6 Nov 1969,
pp 14-15.
JPRS 49392

Foreign Minister Discusses Foreign Policy
Goals, by Francisco G. Manrique, 5 pp.
SPANISH, per, Correo de la Tarde, Buenos Aires,
4-10 Nov 1969, pp 4-5.
JPRS 49403

Candidate Airs Views on Mexico, Hemisphere,
by Francisco G. Manrique, 5 pp.
SPANISH, per, Correo de la Tarde, Buenos Aires,
11-17 Nov 1969, pp 4-6.
JPRS 49459

Possible Leftist Nominee Discusses Popular Unity,
by Jorge Pina, 6 pp.
SPANISH, per, Ercilla, Santiago Chile, 19-25 Nov
1969, pp 10-11.
JPRS 49499

Meeting in Lima on Andean Subregional Agree-
ment, by Carlos Sepulveda Vergara, 5 pp.
SPANISH, per, Ercilla, Santiago, 3-9 Dec 1969,
pp 20-21.
JPRS 49535

Party Agency Discusses Fight Against Absenteeism,
5 pp.
SPANISH, np, Granma, Havana, 30 Oct 1969, p 2.
JPRS 49392

American Volunteer Cane Cutters Interviewed,
12 pp.
SPANISH, per, Granma, Havana, 10 Dec 1969,
pp 1-3.
JPRS 49535

Plans Made for Cuban Pavilion at Expo-70,
by Hipolito Cebretera, 5 pp.
SPANISH, np, Juventud Rebelde, Havana,
19 Nov 1969, p 2.
JPRS 49520

Bolivian Minister Discusses Ovando's
Revolution, by Carlos Nunez, 9 pp.
SPANISH, np, Marcha, Montevideo, 17 Oct
1969, pp 1, 2.
JPRS 49329

Chilean Threat. Becomes Politically Oriented,
by Julio Huasi, 7 pp.
SPANISH, per, OCIAE, Havana, No 32, Aug 1969,
pp 30-33.
JPRS 49329

National Revolutionary Movement States
Position, 10 pp.
SPANISH, np, Presencia, La Paz, 12 Nov 1969,
p 8.
JPRS 49459

Mixon Statement of Latin American Policy Criticized,
by Robert Jordan Pando, 6 pp.
SPANISH, np, Presencia, La Paz, 15 Nov 1969, pp 3,
11.
JPRS 49383

Presencia Interviews Marcelo Quiroga Santa Cruz,
5 pp.
SPANISH, np, Presencia, La Paz, Second Section,
23 Nov 1969, pp 1, 7.
JPRS 49520

Expected Leftist Strategy in 1970 Election
Scored, 5 pp.
SPANISH, per, Punto Final, Santiago de Chile,
25 Nov 1969, pp 6-7.
JPRS 49535

Role of U.S. Aid to Chilean Universities
Analyzed, 5 pp.
SPANISH, per, Punto Final, Santiago,
25 Nov 1969, pp 14-15.
JPRS 49520

Latin Movies Used as Revolutionary Catalyst,
by Julio Huasi, 5 pp.
SPANISH, per, Punto Final, Santiago de Chile,
25 Nov 1969, pp 20-21.
JPRS 49535

Lima Mayor Opinions on Current Political
Situation, by Alfonso Delboy, 8 pp.
SPANISH, per, 7 Dias, 26 Oct 1969, pp 22-25.
JPRS 49329

Latin America
Political (Contd)

The Next President, as Seen by a Boyhood Friend,
by Juan Martinez de Leon, 5 pp.
SPANISH, np, Siempre, Mexico City, 29 Oct 1969,
pp 15, 69.
JPRS 49392

Corvalan Opens Fourteenth Communist Congress,
32 pp.
SPANISH, per, El Siglo, Santiago, 24 Nov 1969,
pp 9-12.
JPRS 49520

Communist Party Defines Stand on Armed Forces,
by Manuel Cantero, 6 pp.
SPANISH, np, El Siglo, Santiago, 25 Nov 1969,
p 5.
JPRS 49520

Jorge Insunza Addresses Fourteenth Party
Congress, 8 pp.
SPANISH, np, El Siglo, Santiago, 26 Nov 1969,
pp 7, 9.
JPRS 49520

Background, Development of OPUS DEI Analyzed,
by E. Echevarria, 13 pp.
SPANISH, per, Sucesos para Todos, Mexico City,
15 Nov 1969, pp 21-23; 22 Nov 1969, pp 34-35;
29 Nov 1969, pp 33-35.
JPRS 49459

Socialists Nominate Allende for Presidency,
6 pp.
SPANISH, np, Ultima Hora, Santiago, 20 Oct
1969, pp 2, 3.
JPRS 49329

Otto Arosemena Interviewed on Political
Future, by Hugo Mas, 7 pp.
SPANISH, per, Vistazo, Guayaquil, Dec 1969,
pp 60-63.
JPRS 49535

Military

Military Man Involved in Contraband Case,
8 pp.
SPANISH, per, Vistazo, Guayaquil, Dec 1969,
pp 4-9.
JPRS 49535

Latin America
Geographic

Geography of Cuba, 381 pp.
SPANISH, per, Bohemia, Havana, Dec 1968-
Aug 1969.
JPRS 49409

Sociological

Results of PNS Services in Nova Friburgo Cited,
by Rogerio Coelho Neto, 5 pp.
PORTUGUESE, np, Jornal do Brasil, Rio de Janeiro,
16 Nov 1969, p 16.
JPRS 49383

Interview with Petkoff on University Reform,
by Olga Gonzalez, 5 pp.
SPANISH, np, Ultimas Noticias, Caracas,
23 Nov 1969, pp 8-4, 8-5.
JPRS 49520

SCIENTIFIC
Aeronautics

Pulse Pressure Sensor for Short Interval Operating Aerodynamic Units, by Bogdanov.

RUSSIAN, bk, Datchik Impul'snogo Davleniya dlya Aerodinamicheskikh Ustanovok Kratkovremennogo Deystviya, 1967.

*ACSI-J-7824

*FSTC-HT-23-329-70

Effect of Airfoil Shape on the Aerodynamic Characteristics of a Wing Near a Ground-plate Surface, by A. I. Yukhimenko.

RUSSIAN, per, Gidrodinamika Bol'shikh Skorostey, No 2, 1966, pp 34-46.

Dept of Navy APL/JHU CLB-3 T-603

Aircraft Metals, by Sh. Ya. Korovskiy. 257 pp. RUSSIAN, bk, Izayushchiye Metally, 1967, pp 1-254.

AIR/FTD/MT-24-391-69

Aircraft Equipment, by Ye. G. Palenyy. 202 pp. RUSSIAN, bk, Oborudovaniye Samoletov, 1968, pp 3-203.

AIR/FTD/HT-23-1215-68

An Aircraft Propeller, by A. N. Lugovtsev, L. M. Pevzner, et al. 2 pp.

RUSSIAN, Patent No. 201,096, 1 Jun 1964, 1967, pp 1-2.

AIR/FTD/HT-23-1387-68

Device for Simulating Aircraft Movement Relative to the Earth's Surface, by A. S. Braverman, D. M. Perlshteyn, et al. 2 pp.

RUSSIAN, Patent No. 201,131, 11 Apr 1966, 1967, pp 1-2.

AIR/FTD/HT-23-1377-68

Retractable Airplane Landing Gear, by R. Lucien 4 pp.

RUSSIAN, Patent No. 205,716, 26 Nov 1965, 1968, pp 1-3.

AIR/FTD/HT-23-1395-68

A device for Recording the Velocity of Atmospheric Turbulence Pulsations From Aircraft, by Yu. P. Sukhov. 3 pp.

RUSSIAN, Patent No. 213,432, 9 Nov 1966, 1968, pp 1-2.

AIR/FTD/HT-23-201-69

Contributions of Studies of Diffusers for Application of Subsonic Aerodynamics, by Raymond Goethals. 215 pp.

FRENCH, mono, Air Ministry, No 243, Paris 1950.

*NASA TT-F-12,835

Computation of a Subsonic or Transonic Airfoil, by R. Legendre.

FRENCH, per, La Recherche Aerospatiale, No 126, 1968, pp 3-13.

*Dept of Navy APL/JHU J-1417

Aerodynamic Coefficients for Control Surface-tab Coupling in Subsonic, Bi-dimensional, Unsteady Flow, by Rolland Dat.

FRENCH, per, La Recherche Aerospatiale, No 129, Mar-Apr 1969, pp 60-.

*NASA TT F-12,829

Supersonic Plane Streams Separated by a Jet Flap, by E. Carafoli, D. Pantazopol. 22 pp.

FRENCH, per, Revue Roumaine des Sciences Techniques. Serie de Mechanique Appliquee, Vol 13, No 4, 1968, pp 555-570.

AIR/FTD/HT-23-354-69

Survey of the Ground Effect of V/Stol Aircrafts with Jet Propulsion: Report of Literature, by E. Schwantes. 28 pp.

GERMAN, rpt, Uebersicht Ueberden Bodeneffekt bei Strahlgestuetzen V/Stol: Flugzeugen Literaturbericht.

NASA TT F-12,573

Synthesis of Automated Flight Control System Using Automation Control Theory, by Kenji Nakagawa.

JAPANESE, per, Journal of the Japan Society for Aerospace Science, Vol 16, Dec 1968, pp 425-434.

*NASA TT F-12,795

Static and Fatigue Strenght of End-closed Filament-wound Vessels Under Internal Pressure, by H. Asada.

JAPANESE, per, Journal Japan Society for Aeronautical and Space Sciences, Vol 17, Mar 1969, pp 118-120.

*NASA TT F-12,818

Heat Elimination in Airplane Wheel Brakes With Heavy Thermal Loads, by N. Marcikic. 14 pp.

SERBO CROATIAN, per, Tekhnika, No 11, 1967, pp 1862-1868.

AIR/FTD/HT-23-982-68

Agricultural Engineering,
RUSSIAN, bk, title unknown, 1967
*CFSTI TT 70-50042/1

Wheat Hybrids Which are Promising and Rust-resis-
tant Under the Various Ecologic Conditions of
Azerbaijdzhan, by Sh. Ya. Mamedova.
RUSSIAN, per, Doklady AzerBSSR, Vol 21, No 5,
1965, pp 85-88.
*ACSI-J-7821
*FSTC-HT-23-529-70

Sugar Beet Growing in Khmel'Nitskaya Oblast,
by I. Lavzhenko, 12 pp.
RUSSIAN, per, Ekonomika Sel'skoy Ukrainy,
Kiev, No 8, 1969, pp 60-65.
JPRS 49531

Farm Irrigation in Northern Caucasus Reviewed,
by A. A. Gadzhiev, 9 pp.
RUSSIAN, per, Gidrotekhnika i Melioratsiya,
Moscow, No 10, 1969, pp 1-6.
JPRS 49430

Problems in Draining Poles'ye Discussed,
by N. Matukovskiy, 5 pp.
RUSSIAN, np, Izvestiya, Moscow, 19 Nov 1969,
p 4.
JPRS 49531

Soviet Production of Chemical Fertilizers
Outlined, by V. M. Borisov, Ye. V. Yuzhnaya,
11 pp.
RUSSIAN, per, Khimicheskaya Promyshlennost,
Moscow, No 10, 1969, pp 20-24.
JPRS 49434

Late Harvest Problems in Eastern USSR Cited, by
A. Barayev, 5 pp.
RUSSIAN, np, Pravda, Moscow, 4 Dec 1969, p 2.
JPRS 49503

Rotary Tillage and Agricultural Machines,
by A. D. Dalin, P. V. Pavlov, 258 pp
RUSSIAN, mono, Rotatsionnye gruntoobrabaty-
vayushchie i zemleroi nye mashiny, 1950
*CFSTI TT 70-50041

Thermal and Moisture Regimes of the Soils
of the USSR (Reports to the 9th Interna-
tional Congress of Soil Scientists, 144 pp.
RUSSIAN, mono, Teplovoi i Vodnyi rezhim
pochv SSSR (Foklady K IX Mezhdynavodhomu
vongressu pochvovedov), 1968
*CFSTI TT 70-50045

Agricultural Statistical Workers Hold Meeting,
by B. Dubnov, 13 pp.
RUSSIAN, per, Vestnik Statistiki, Moscow, No 9,
Sept 1969, pp 74-89.
JPRS 49503

Changes to Model Kolkhoz Charter Suggested,
by M. Sumonov, V. Tarasevich, 5 pp.
RUSSIAN, per, Voprosy Ekonomiki, Moscow,
No 10, 1969, pp 117-119.
JPRS 49430

Increase in Technical Crops Called For, 5 pp.
RUSSIAN, per, Zakunki Sol'skokhozyaystvennykh
Produktov, Moscow, No 10, 1969, pp 1-2.
JPRS 49531

Land Reclamation Results for 1968 Reviewed,
by Ye. Alatorsev, 8 pp.
RUSSIAN, per, Zemledeliye, Moscow, No 6,
1969, pp 52-56.
JPRS 49430

Use of Apiculture in Agriculture Discussed,
by A. Mel'nichenko, 6 pp.
RUSSIAN, per, Zemledeliye, Moscow, No 7,
1969, pp 42-45.
JPRS 49430

Storage, Application of Manure Explained,
by A. Artyushin, V. Vasil'yev, 8 pp.
RUSSIAN, per, Zemledeliye, Moscow, No 10,
1969, pp 35-40.
JPRS 49430

Growing Cotton on Reclaimed Lands Discussed,
by Muhammad Bakr Ahmad, 10 pp.
ARABIC, np, Al-Ahram, Cairo, 4 Oct 1969, p2.
JPRS 49388

Agricultural Cooperation in CEMA Nations Traced,
by Dyanko Furtunov, 6 pp.
BULGARIAN, per, Kooperativno Zemedelie, Sofia,
Sept 1969, pp 5-7.
JPRS 49380

Current Meat Shortage Discussed in Detail, 14 pp.
CZECH, np, Hospodarske Noviny, Prague, 7 Nov 1969,
pp 8-9.
JPRS 49380

Two Views on Role of Agricultural Cooperatives,
by Hassan Belkhdja, Sahi Ladgham, 6 pp.
FRENCH, np, L'Action, Tunis, 2 Dec 1969,
pp 3, 5.
JPRS 49534

Agricultural Modernization, Growth Described,
by D. Dumitru, 10 pp.
ROMANIAN, per, Probleme Economice, Bucharest, Aug
1969, pp 140-153.
JPRS 49391

Modern Agricultural Machinery Exhibited at Fair,
6 pp.
GERMAN, per, Deutsche Agrartechnik, East Berlin,
Sept 1969, pp 401-403.
JPRS 49517

Havana Province Prepares for Record Sugar
Harvest, by Jose Gabriel Guma, 5 pp.
SPANISH, np, Granma, Havana, 12 Nov 1969,
p 4.
JPRS 49459

Planners Review Agricultural Achievements, by
G. Fornacon, H. -G. Joffer, 11 pp.
GERMAN, per, Deutsche Agrartechnik, East Berlin,
Oct 1969, pp 455-459.
JPRS 49538

Organization and Technology Needed in Agriculture,
by Armando Hart Devalos, 22 pp.
SPANISH, per, Juventud Rebelde, Havana, 26 Oct 1969,
pp 2-4.
JPRS 49439

Crop, Weather Report, September 1969, by
D. Krumbiegel, 5 pp.
GERMAN, per, Feldwirtschaft, East Berlin,
No 11, Nov 1969, pp 535-536.
JPRS 49425

Objectives of Agrarian Reform Program Examined,
by Gonzalo Arroyo, 19 pp.
SPANISH, per, Mensaje, Santiago, Nov 1969,
pp 555-563.
JPRS 49403

Agricultural Coops Projected Plans Analyzed,
by Andras Pilling, 9 pp.
HUNGARIAN, per, Társadalmi Szemle, Budapest, Nov
1969, pp 67-73.
JPRS 49391

System of Planning Reaping and Harvesting,
by Frank Agüero, 8 pp.
SPANISH, per, Verde Olivo, Havana, 5 Oct 1969,
pp 20-24.
JPRS 49329

Herdsmen to Honor Agricultural Cooperativization
Event, by L. Rinchin, 6 pp.
MONGOLIAN, per, Namyn Am'dral, Ulan Bator,
No 2, 1969, pp 21-24.
JPRS 49336

Spring Rice Planting Schedules Detailed, by
Bui Huy Dap, 6 pp.
VIETNAMESE, per, Khoa Hoc Thuong Thuc, Hanoi,
No 314, 30 Oct 1969, pp 1, 3.
JPRS 49527

Need to Develop Agrarian Circles Cited, by
Janusz Wasylkowski, 10 pp.
POLISH, per, Zycie Gospodarcze, Warsaw, 9 Nov
1969, pp 1, 2.
JPRS 49375

Implementation of Statutes on Farm Cooperatives
Outlined, 8 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 16 Oct 1969,
p 2.
JPRS 49333

Aspects of Coffee Problem are Analyzed, by
Joao Penido, 5 pp.
PORTUGUESE, np, Jornal do Brasil, Rio de Janeiro,
9 Nov 1969, p 54.
JPRS 49392

Reorganization Key to 1970 Irrigation Plans,
by Ha Ke Tan, 8 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 23 Oct 1969, p 2.
JPRS 49442

Main Horticultural, Viticultural Aims Dis-
cussed, by Nicolae Stefan, 5 pp.
ROMANIAN, per, Agricultura, Bucharest,
No 8, 6 Nov 1969, pp 1, 5.
JPRS 49401

Hai Hung Completes 3-year Plan, Sets New Goals
for 1970, by Nguyen Hoai Bac, 5 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 24 Oct 1969, p 2.
JPRS 49386

Scientific
Agriculture (Contd)

Nam Ha Province Sets Farm Goals for 1970, by Vu Thien, 6 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 25 Oct 1969, pp 2, 4.
JPRS 49386

Ha Tay Province Issues 1970 Farm Goals in Memory of Ho, by Nguyen Zuan Truong, 6 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 28 Oct 1969, p 2.
JPRS 49345

Spring Rice Constitutes Revolution in North's Farming, by Bui Huy Dap, 7 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 30 Oct 1969, p 2.
JPRS 49345

Poor Organization Blamed for Ha Bac Water Conservancy Failures, by Anh Trang, 5 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 8 Nov 1969, p 2.
JPRS 49466

1970 Water Conservancy Goals Outlined in Thai Binh Province, by Vu Hanh, 6 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 11 Nov 1969, p 2.
JPRS 49489

Province Lists Five Steps to Improve Agriculture, by Hoang Khac Kieu, 5 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 19 Nov 1969, p 2.
JPRS 49527

Women's Role in Agriculture, Production Encouraged, 5 pp.
VIETNAMESE, per, Phu Nu Vietnam, Hanoi, No 245, 1 Oct 1969, pp 16, 17.
JPRS 49500

Government Issues Pig-Raising Guidelines, 6 pp.
VIETNAMESE, np, Quan Doi Nhan Dan, Hanoi, 21-22 Aug 1969, p 3.
JPRS 49333

Scientific
Astronomy & Astrophysics

Course in Theoretical astrophysics, by V. V. Sobolev. 493 pp.
RUSSIAN, bk, Kurs Teoreticheskoy Astrofiziki, 1967.
NASA TT F-531

Methods of Calculation of Characteristics of Solar Radiation, by S. I. Sivkov, 231 pp.
RUSSIAN, mono, Metody rascheta kharakteristik solnechnoi radiatsiy, 1968
*CFSTI TT 70-50055

Numerical Calculation of Radiowave Propagation in a Vertical Inhomogeneous Troposphere, by Ye. S. Birger, N. B. Konyukhova.
RUSSIAN, per, Radiotekhnika i Elektronika, No 7, 1969, pp 1147-1156.
Dept of Navy APL/JHU T-2359

Atmospheric Sciences

Spectral Characteristics of Air at Temperatures Above 10,000°K, by A. A. Kon'kov.
RUSSIAN, bk, Fizicheskaya Gazodimanika Ioniz i Khim Reagiruyushchikh Gazov, 1968, pp 13-19.
*NASA TT F-12,792

Stationary Model of Wind Distribution with Height in the Atmospheric Boundary Layer, by V. L. Krivosheev. 14 pp.
RUSSIAN, per, Gidrometeorologicheskii Nauchno-issledovatel'skiy Tsentr SSSR, No 16, 1968, pp 68-79.
AIR/FTD/HT-23-417-69

The Relationship Between the Attenuation of Laser Radiation and the Water Content of Artificial Fog, by M. A. Kolosov.
RUSSIAN, per, Izv Ak Nauk SSSR, Fiz Atmosfery i Okeana, Vol 5, No 6, 1969, pp 642-646.
Dept of Navy APL/JHU T-2363

Characteristics of the Washout of a p^{32} Aerosol Injected into a Cloud, by I. I. Burtsev, L. V. Burtseva, 20 pp.
RUSSIAN, bk, Issledovaniye Protseessov Samo-ochishcheniya Atmosfery ot Radioaktivnykh Izotopov, 1969, pp 335-345.
AEC/UCRL-Tr-10404-69

Meteorological Researches: Circulation and Climatological Epochs in the Northern Hemisphere in the First Half of the 20th Century, by M.E. Liakhov, 157 pp.
RUSSIAN, mono, Meteorologicheskie epokhi severnogo polushariya v pervoi polovine XX veka, 1968
*CFSTI TT 70-50056

Investigations on the General Circulation of the Atmosphere. No. 16, 366 pp
RUSSIAN, mono, Meteorologicheskie issledovaniya obshechaya tsirkulyatsiya atmosfery, 1968
*CFSTI TT 70-50052

Basic Information Theory of Atmospheric Visibility, by V. K. Kagan, 168 pp.
RUSSIAN, mono, Osnovy Informatsionnoi teorii vidimosti v atmosfery, 1968
*CFSTI TT 70-50053

Structure of Fields of Meteorological Parameters in the Cumulo-Nimbus Zone, by S. N. Smirnov, 120 pp.
RUSSIAN, bk, Struktura Polei Meteorologicheskikh Elementov v Zone Kuchovo-Dozhdevykh Oblakov, 1969
*CFSTI TT 70-50020

Calculation of Glaze Wind Loads Upon High Installations, by M. V. Zavarina, M. M. Borisenko, 12 pp.
RUSSIAN, per, Trudy Glavnaya Geofizicheskaya Observatoriya, No 210, 1967, pp 39-46.
ARM/FSTC/HT-23-486-69

Investigation of Turbulent Conditions in the Surface Layer of the Atmosphere in Various Geographical Regions, by V. P. Gracheva. 11 pp.
RUSSIAN, per, Trudy Leningrad. Glavnaya Geofizicheskaya Observatoriya, No 185, 1966, pp 55-62.
AIR/FTD/HT-23-1090-68

Measuring Average Wind Speed, by V. Yu. Torochkov, D. Ya. Surazhskiy. 5 pp.
RUSSIAN, per, Trudy Leningrad. Nauchno-issledovatel'skiy Institut Gidrometeorologicheskogo Priborostroyeniya. Informatsionnyye Materialy po Gidrometeorologicheskim Priboram i Metodam Nablyudeniya, No 17, 1967, pp 15-18.
AIR/FTD/HT-23-341-69

Continuous Duration of Wind Speeds Under the Conditions of the Plains Areas in the USSR, by T. N. Anisimova. 7 pp.
RUSSIAN, per, Trudy Moscow. Nauchno-Issledovatel'skiy Institut Aeroklimatologii, No 52, pp 65-70, 1968,
AIR/FTD/HT-23-261-69

Approximate Calculation of Wind Speed in the 100 Meter Atmospheric Surface Boundary Layer of the Central Regions of European USSR, by T. F. Solokha. 27 pp.
RUSSIAN, per, Trudy Moscow. Nauchno-Issledovatel'skiy Institut Aeroklimatologii, No 52, 1968, pp 71-92.
AIR/FTD/HT-23-261-69

Informational Materials on Hydrometeorological Instruments and Observation Methods, by A. A. Yeliseyev, 5 pp.
RUSSIAN, per, Trudy Nauchno-Issledovatel'skiy Institut Gidrometeorologicheskogo Priborostroyeniya, No 33, 1967, pp 40-42.
ARM/FSTC/HT-23-634-69

On the Problem of Error in Measuring the Slant Range of Visibility by the Equal Angles Method, by F. N. Shevchenko.
RUSSIAN, per, Trudy Nauchno-Issledovatel'skiy Institut Gidrometeorologicheskogo Priborostroyeniya, No 18, 1968, pp 70-76.
ARM/FSTC/HT-23-708-69

Turbulence and Vertical Currents in the Boundary Layer of the Atmosphere, by P. A. Vorontsov. 282 pp.
RUSSIAN, bk, Turbulentnost' i Vertikal'nyye Toki v Pogranichnom Sloye Atmosfery, 1966, pp 1-296.
AIR/FTD/HT-23-1332-68

A Model Study of Changes in Wind With Altitude in a Planetary Boundary Layer, by N. Godev, D. Jordanov. 3 pp.
BULGARIAN, per, Doklady Bulgarska Akademiya Na Naukite, Vol 20, No 9, 1967, pp 911-913.
AIR/FTD/HT-23-1328-68

Measurement and Control of Humidity at the Sintering Plant of the Marchienne Works, SA Cockerill-Ougree-Provence, by I. Harveng.
FRENCH, per, Revue Metall, Vol 66, No 6, 1969, pp 465-470.
*AEC-Tr-2926

Mixed Control in Differential Games, by
N. M. Krasovskiy, A. N. Subbotin, 5 pp.
RUSSIAN, per, Doklady Akademii Nauk SSSR,
Moscow, Vol 188, No 4, 1969, pp 745-747.
JPRS 49455

Differential Games with Information Lag, by
F. L. Chernous'ko, 6 pp.
RUSSIAN, per, Doklady Akademii Nauk SSSR,
Moscow, Vol 188, No 4, 1969, pp 766-769.
JPRS 49455

Biological & Medical Sciences

Peculiarities of Distribution of Certain Arbo-
viruses in the Brazil Part of the Amazon Basin,
by D. K. Lvov.
RUSSIAN, per, Unknown, pp 188-192, 1967.
*ACSI-J-7814
*FSTC-HT-23-59-70

Comparative Study of the Cytopathic Activity of
Some Arboviruses in Tissue Cultures, by
A. I. Rezepova.
RUSSIAN, per, Unknown, 1967, pp 173-177.
*ACSI-J-7817
*FSTC-HT-23-53-70

Pests of Siberian Larch, by A. S. Rozhkov,
328 pp.
RUSSIAN, mono, Title Unknown, 1966
*CFSTI TT 70-50043

Participation of Trace Elements in Biochemical
Processes Connected with Biosynthesis of Proteins
in Plants, by Ya. V. Peyve.
RUSSIAN, per, Agrokhim, No 2, 1969, pp 143-150.
HEW NIH
10-25-69

Two Motor Systems for the Oculomotor Apparatus
and Their Function in Nystagmic Movements of the
Eyes, by D. P. Matyushkin. 6 pp.
RUSSIAN, rpt, AN SSSR, Nauchnyy Sovet po
Kompleksnoy Probleme "Kibernetika". Voprosy
Bioniki, 1967, pp 387-390.
AIR/FTD/MT-24-484-68

Water Bloom, by A. V. Topachevskiy
RUSSIAN, Bk, Akad. Nauk Ukrainskoi SSR,
Kiev, 1968. pp. 67-81, 81-91, 92-149,
159-171, 174-179, 335-343.
*CFSTI TT 70-54004/1-6

Structural Organization of the Motor Zone in
the Cerebral Cortex of Dolphins, by
V. S. Kesaren, L. I. Malofeyeva. 10 pp.
RUSSIAN, per, Arkhir Anatomoy, Gistologiy i
Embriologiy, No 4, 1969, pp 48-55.
ACSI-J-6954
ID 2204004769

Atlas of the Anatomy and Ontogenesis of Viruses
in Man and Animals, by A. A. Avakyan,
A. F. Bykovskiy. 495 pp. approx.
RUSSIAN, bk, Atlas Anatomii i Ontogeneza Virusov
Cheloveka i Zhivotnykh, 1970.
CONSULTANTS BUREAU/PLENUM PRESS

Atlas of the Rabbit Brain, by S. M. Blinkov,
F. A. Brazovakaya, et al. approx 90 pp.
RUSSIAN, bk, Atlas Golovnogo Mozga Krolika, 1970
CONSULTANTS BUREAU/PLENUM PRESS

Biology of Embryo Development in Birds,
by V.V. Rol'nik, 425 pp.
RUSSIAN, mono, Biologiya embrional'nogo
razvitiya ptits, 1968
*CFSTI TT 70-50038

Foraminifera in the Pinakul Depositions of
Chukchi, by I. M. Khoreva. 18 pp.
RUSSIAN, per, Byulleten Komissiy po Izuch-
eniyu Chetvertichnogo Perioda Akad Nauk SSSR,
No 31, 1966, pp 104-116.
Dept of Inter
BCF/OFF
A-33/Nov 69/65
On Loan Only

Plasma Diagnostics, No. 2. 447 pp.
RUSSIAN, bk, Diagnostika Plazmy, Vypusk 2, 1968,
CONSULTANTS BUREAU/PLENUM PRESS

Echolocation Differentiation and Characteristics
of Radiated Pulses in Dolphins, by
E. Sh. Ayrapet'yants, A. G. Golubkov, 5 pp.
RUSSIAN, per, Doklady Akademii Nauk SSSR,
Moscow, Vol 188, No 5, 1969, pp 1197-1199.
JPRS 49479

The Ecology of Fishes, by G. V. Nikol'skiy.
352 pp.
RUSSIAN, bk, Ekologiya Ryb, 1963, 368 pp.
Dept of Inter
BCF/OFF
A-33/Nov 69/34
On Loan Only

Method of Phase Interval in the Diagnostic Problem, by M. L. Bykhovskiy. 6 pp.
RUSSIAN, per, Ekspperimental'naya Khirurgiya, No 2, 1962, pp 16-19.
AIR/FTD/HT-23-244-68

On the Temperature Dependence of Metabolism in Poikilothermic Animals, by I. V. Ivleva, M. I. Popenkina. 35 pp.
RUSSIAN, bk, Fiziologicheskiye Osnovy Ekologii Vodnykh Zhivotnykh Akad Nauk SSSR, 1968, pp 29-51.
Dept of Inter
BCF/OFF
A-33/Nov 69/21
On Loan Only

Copper Compounds in Plants, by S. G. Yuferova.
RUSSIAN, per, Fiziol Rast, Vol 16, No 1, 1969, pp 8-12.
HEW NIH
10-14-69

Fish physiology in connection with acclimatization and the Fish Industry, by T. I. Privol'nev, 200 pp.
RUSSIAN, bk, Fiziologiya ryb v svyazi s akklimatizatsiei i ryborazvedeniem, 1964
*CFSTI TT 70-50063

Physiological and Biochemical Investigations of Plants, approx 160 pp.
RUSSIAN, bk, Fiziologo-Biohimicheskie Issledovaniya Rastenii, 1970.
CONSULTANTS BUREAU/PLENUM PRESS

Accuracy Estimate of Quantitative Collections of Zooplankton, by A. A. Stroganov, V. Kovalev. 15 pp.
RUSSIAN, per, Gidrobiologicheskii Zhurnal, Vol 5, No 2, 1969, pp 67-73.
Dept of Inter
BCF/OFF
A-33/Nov 69/129
On Loan Only

Effect of Suspended Particles on Breathing Investigated, by V. I. Bab'in, 7 pp.
RUSSIAN, per, Gigiyena i Sanitariya, Moscow, No 10, Oct 1969, pp 49-53.
JPRS 49537

Effect of Vibration in Various High-Frequency Ranges on Certain Physiological Functions of the Organism of the Worker, by A. M. Mikulinskiy. 7 pp.
RUSSIAN, per, Gigiyena Truda i Professional'nyye Zabollevaniya, No 10, 1967, pp 48-50.
AIR/FTD/HT-23-1454-68

Exploration of the Fauna of the Seas, VI (XIV) Biological Results of the Soviet Antarctic Expedition (1955-1958) 4., by B.E. Bykhovskiy, 274 pp.
RUSSIAN, bk, Issledovaniya fauny morei VI (XIV) Rezul'taty Biologicheskikh issledovaniy sovetskoi Antarticheskoi ekspeditsiy (1955-1958gg.) 4, 1968
*CFSTI TT 70-50014

Research of Structural Changes in a Nerve During Excitation and in Artificial Membranes Under the Action of an Electrical Field by Optical Methods, by G. N. Berestovskiy.
RUSSIAN, rpt, Issledovanie Opticheskimi Metodami Strukturnykh Izmeneniy V Nerve Vo Vremia Vozbuzhdeniya i v Iskusstvennykh Membranakh Pod Deistviem Elektricheskogo Polia, 1969, 34 pp.
HEW NIH
10-5-69

On the Structure of the Antibiotic Esperin, by Yu. A. Ovchinnikov.
RUSSIAN, per, Khim Prirodn Soedin, No 4, 1968, pp 236-244.
HEW NIH
10-1-69

Characteristic of Qualitative Changes of Fish at Thawing, by A. I. Piskarev, G. I. Krylov. 8 pp.
RUSSIAN, per, Kholodil'naya Tekhnika, No 7, 1969, pp 34-39.
Dept of Inter
BCF/OFF
A-33/Nov 69/107
On Loan Only

Structural and Mechanical Properties of Muscular Tissue of Fish and Their Changes at Freezing, 7 pp.
RUSSIAN, per, Kholodil'naia Tekhnika, No. 10, 1969, pp. 40-46
*CFSTI TT 70-54006

Coccidiosis of Agricultural Animals, by N. P. Orlov, 165 pp.
RUSSIAN, mono, Koktsidiozy sel'skokhozyaistvennykh zhivotnykh, 1956
*CFSTI TT 70-50040

Space Investigations and Biological Sciences, by
O. G. Gazenko. 14 pp.
RUSSIAN, rpt, Konferentsiya Organizatsii
Ob'yedinennykh Natsiy po Issledovaniyu i Ispol'
zovaniyu Kosmicheskogo Prostranstva v Mirovkh
Iselyakh. Conference Held in Vienna, Austria,
1968, pp 1-10.
AIR/FTD/MT-24-98-69

Concentration of Matter and Action of Enzymes in
Coacervates, by T. N. Yevreinova. 223 pp.
RUSSIAN, bk, Kontsentirovaniye Veshchestv i
Deystviye Fermentov v Koatservatkh, 1966,
pp 3-186.
NASA TT F-525

On the Effect of Fishing on the Rate of Growth
and Maturation of the Barents Sea Cod, by
V. P. Ponomarenko. 20 pp.
RUSSIAN, per, Materialy Rybokhozyaystvennykh
Issled Severnogo Basseyna, No 11, 1968,
pp 39-51.
Dept of Inter
BCF/OFF
A-33/Nov 69/31
On Loan Only

Mechanisms of Self-Regulation of the Brain, by
V. I. Syrenskey. approx 128 pp.
RUSSIAN, bk, Mekhanizmy Samoregulirovaniya
Golovnogo Mozga, 1970.
CONSULTANTS BUREAU/PLENUM PRESS

Metabolism of Chlorophyll in Green Plants,
by A. A. Shlyk, 396 pp.
RUSSIAN, bk, Metabolizm Khlorofilla v
Zelenom Rasteniy, 1965
*AEC-tr-7094
*UC-48
*CFSTI TT 70-50009

Metabolism and Structure of Photosynthetic
Apparatus. approx 160 pp.
RUSSIAN, bk, Metabolizm i Stroenie Fotosinteti-
cheskogo Apparatura, 1970.
CONSULTANTS BUREAU/PLENUM PRESS

Mutagenesis of Viruses in Man and Animals, by
G. D. Zasukhina. approx 160 pp.
RUSSIAN, bk, Mutagenez Virusov Cheloveka i
Zhivotnykh, 1970.
CONSULTANTS BUREAU/PLENUM PRESS

Report on the Work of the Societies of
Traumatologists and Orthopedists for March
1969, by S. T. Zatsepin, 12 pp.
RUSSIAN, per, Ortopediya, Travmatologiya i
Protezirovaniye, Moscow, Aug 1969, pp 88-92.
JPRS 49449

Essentials of Cestodology, by K. I. Abuladze
417 pp.
RUSSIAN, mono, Osnovy Cestodologiy,
Akademiya Nauk USSR, Vol. 4, 1963
*CFSTI TT 70-50039

Precipitation in Gel Test at Multiple-Approach
Examination of Children Convalescing From Botkin's
Disease, by N. S. Protoklitova.
RUSSIAN, per, Pediatrica, Vol 46, No 1, 1967,
pp 33-38.
HEW NIH
10-12-69

Plasma: The Fourth State of Matter, by
D. A. Frank-Kamenetskiy. 160 pp.
RUSSIAN, bk, Plazma—Chetvertoe Sostoyanie
Veshchestva, 3rd edition, 1968.
CONSULTANTS BUREAU/PLENUM PRESS

Virologist Zil'ber Talks on Research Problems,
by L. A. Zil'ber, 12 pp.
RUSSIAN, per, Priroda, Oct 1969, pp 48-53.
JPRS 49508

Blood Transfusion Problems. Distribution of Trans-
fused Leukocytes and Bone Marrow Cells in the Organs
and Tissues of the Recipient's Body, by
A. V. Ilyukhin.
RUSSIAN, per, Probl Gemat, Vol 8, No 7, 1963,
pp 46-51.
HEW NIH
10-22-69

Effects of Some Blood Anticoagulants on the
Phagocytic Function of Leukocytes, by A. I. Shustov.
RUSSIAN, per, Probl Gemat, Vol 11, No 9, 1966,
pp 41-43.
HEW NIH
10-10-69

Treatment of Children Suffering From Acute Leukemia,
by Passive Cyclic Immunization with Autoplasma and
Autoleukocytes Obtained During Remission, by
S. V. Skurkovich.
RUSSIAN, per, Probl Gemat, Vol 12, No 11, 1967,
pp 18-24.
HEW NIH
11-19-69

Dynamic Pattern Recognition by Means of Threshold
Nets, by V. A. Dolyatovskiy, I. D. Ponomareva.
8 pp.
RUSSIAN, per, Problemy Neyrokibernetiki, 1966,
pp 227-232.
AIR/FTD/MT-24-34-69

- Radiation Corrosion, by A. V. Byalobzhetskii, 216 pp.
RUSSIAN, bk, Radiatsionnaya Korroziya, 1964
*AEC-tr-7096
*UC-41
*CFSTI TT 70-50005
- Breeding Commercial Fishes in Thermal Water Bodies, by V. Belyayev. 5 pp.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 7, 1969, pp 19-21.
Dept of Inter
BCF/OFF
A-33/Nov 69/90
On Loan Only
- Fishes of Wadge Bank (Southern Hindustan), by Ye. I. Shabotinets.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 11, 1969, pp 6-7.
*Dept of Inter
BCF/OFF
*CFSTI TT 69-59000/11
- Yellowfin and Bigeye Tuna of the Gulf of Guinea, by V. V. Ovchinnikov.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 11, 1969, pp 8-9.
*Dept of Inter
BCF/OFF
*CFSTI TT 69-59000/11
- Peculiarities of Daily Vertical Migrations of Plankton-eating Fish, by S. G. Zusser.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 11, 1969, pp 10-12.
*Dept of Inter
BCF/OFF
*CFSTI TT 69-59000/11
- Chum Fry Breeding in Ponds as a Means for Increasing Their Viability, by L. I. Zhuykova.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 11, 1969, pp 13-14.
*Dept of Inter
BCF/OFF
*CFSTI TT 69-59000/11
- Mucopolysaccharides of Fish, by T. M. Safronova.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 11, 1969, pp 65-69.
*Dept of Inter
BCF/OFF
*CFSTI TT 69-59000/11
- Effect of Buffer Capacity on Moisture Retention of the Muscular Tissue of Fish, by N. A. Golovkin.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 11, 1969, pp 69-72.
*Dept of Inter
BCF/OFF
*CFSTI TT 69-59000/11
- Quality of Variously Manufactured Fish Meal from Caspian Kilka, by L. N. Yegorova.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 11, 1969, pp 72-75.
*Dept of Inter
BCF/OFF
*CFSTI TT 69-59000/11
- Selection of Carp and Questions on the Intensification of pond fish culture, by V. S. Kirpichnikov, 260 pp.
RUSSIAN, bk, Selektsiya karpa i voprosy intensifikatsiy prodovogo rybovodstva, 1966
*CFSTI TT 70-50064
- Marine Bionics, by R. F. Zhukov. 5 pp.
RUSSIAN, per, Sudostroyeniye, No 3, 1969.
ACSI-J-6951
ID 2204004469
- Some Data on Occurrence of Scombroid Larvae in the Open Waters of the Tropical Atlantic, by V. L. Zharov, A. M. Zhudova. 21 pp.
RUSSIAN, per, Trudy AtlantNIRO, No 18, 1967, pp 201-215.
Dept of Inter
BCF/OFF
A-33/Nov 69/16
On Loan Only
- Catalase Activity During Muscular Activity in Birds, by G. I. Rogachev, 7 pp.
RUSSIAN, per, Trudy Bashkirskii Selskokh Institute, Vol 12, No 3, 1966, pp 83-87.
AEC/ANL-Tr-768-69
- Observations of Small Cetaceans in Far Eastern Seas and NW Pacific, by M. M. Sleptsov.
RUSSIAN, per, Trudy Inst Morfologiy Zhivotnykh, Vol 34, 1961, pp 136-143.
*Dept of Navy NOO Trans 482
- Aphroditidae of the Kurile-Kamchatka Trench, by P. V. Ushakov. 10 pp.
RUSSIAN, per, Trudy Inst Okeanologiy, No 12, 1955, pp 311-321.
Dept of Inter
BCF/OFF
A-33/Nov 69/126
On Loan Only

The Formation of Conditioned Reflexes to a Magnetic Field in Fishes, by Yu. A. Kholodov. 12 pp.

RUSSIAN, per, Trudy Soveshchaniy Ikhtiol Kommissiya Akad Nauk SSSR, No 8, 1958, pp 82-89.

Dept of Inter

BCF/OFF

A-33/Nov 69/18

On Loan Only

Morphogenesis of Central Correlations in the Development of the Sucking Reflex in Man, by Ye. L. Golubeva

RUSSIAN, per, Trudy VI Vsesiounnogo S'ezda Anatomov, Gistologov, i Embriologov, No 2, 1962, pp 159-161.

HEW NIH

10-27-69

New Instruments for Gas Analysis in Modern Medicine and Physiology; Transactions of 2nd Anniversary Conference "Medfizpribor" SKTB, Held 11 and 12 June 1965. 258 pp.

RUSSIAN, rpt, Trudy 2-Y Yubileynoy Konferentsiy SKTB "Medfizpribor" Sostoyavsheysya 11-12 Iyunya 1965 Goda, 1967.

ACSI-J-6926

ID 2204003169

The Effect of Cortisone on Cell Division and the Activity of Thymidine Kinase and Thymidylate Kinase in Regenerating Liver of Rats, by V. P. Mal'kova.

RUSSIAN, per, Tsitologiya, Vol 10, No 4, 1968, pp 476-480.

HEW NIH

11-8-69

Production of Interferon by Human and Animal Macrophages and Leukocytes, by

V. I. Rudenko, Al. A. Smorodintsev, 13 pp.

RUSSIAN, per, Tsitologiya, Leningrad, No 8, 1969, pp 1039-1047.

JPRS 49480

Interrelation Between Phytoplankton and Phytomicrobenthos of Reservoirs, by

K. S. Vladimirova.

RUSSIAN, bk, Tsveteniye Vody, 1968, pp 67-80.

*Dept of Inter

BCF/OFF

Localization and Physiological State of Mass Species of Blue-green Algae During Late-Autumn and Spring Periods, by V. M. Chernousova.

RUSSIAN, bk, Tsveteniye Vody, 1968, pp 81-91.

*Dept of Inter

BCF/OFF

Water Blooming Spots, Surged Masses and Casting Ashore of Blue-green Algae and Biological Process Occurring in Them, by L. P. Braginsky.

RUSSIAN, bk, Tsveteniye Vody, 1968, pp 92-149.

*Dept of Inter

BCF/OFF

Agents of Water Bloom and Bacteria, by O. I. Bershova.

RUSSIAN, bk, Tsveteniye Vody, 1968, pp 159-170.

*Dept of Inter

BCF/OFF

Consumption of Infusoria, by K. K. Audulev.

RUSSIAN, bk, Tsveteniye Vody, 1968, pp 174-179.

*Dept of Inter

BCF/OFF

On Application of Cytochemical Methods During the Study of Vital Activity of Blue-green Algae, by V. I. Osetrov.

RUSSIAN, bk, Tsveteniye Vody, 1968, pp 335-343.

*Dept of Inter

BCF/OFF

Fertilization of Fish Ponds, by G. G. Vinberg, V. P. Lyakhnovich. 482 pp.

RUSSIAN, bk, Udobrenie Prudov, 1965, 271 pp.

Dept of Inter

BCF/OFF

A-33/Nov 69/91

On Loan Only

Artificial and Synthetic Food, by A. N. Nesmeyanov, 28 pp.

RUSSIAN, per, Vestnik Akademiy Nauk SSSR, No 1, 1969, pp 27-44.

ARM/FSTC/HT-23-028-70

Susceptibility of Specimens Taken from the World Wheat Collection at the All-union Institute of Plant Protection to Stem Rust, by

N. I. Semenko.

RUSSIAN, per, Vestnik Selskokhozyaystvennoy Nauki, No 1, 1968, pp 34-39.

*ACSI-J-7820

*FSTC-HT-23-528-70

Electron-Microscope Studies of Border Epithelial Cells of the Small Intestines of Piglets (a)

Healthy and (b) Suffering from Infectious Gastroenteritis, by K. N. Yazykova, V. M. Zhuravlev, 10 pp.

RUSSIAN, per, Veterinariya, Vol 43, No 9, 1966, pp 141-171.

AEC/NP-Tr-1809

Methodological Problems of Modeling Neuron Structures, by N. V. Pozin, 17 pp.
RUSSIAN, per, Voprosy Filosofii, Moscow, No 8, 1969, pp 85-96.
JPI3 49384

The New Species of Eelpouts of the Genus Lycenchelys Gill (Pisces, Zoarcidae) from Bathypelagic Depths in the Scotia Sea, by A. P. Andriyashev, Yu. Ye. Permitin.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1968, pp 611-618.
Dept of Inter
BCF/OFF
A-33/Nov 69/36
On Loan Only

New Data on the Systematics of Gobies of the Ponticola Iljin Group in Relation to Variation Within Species and Species Formation, by V. I. Pinchuk.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1968, pp 619-627.
Dept of Inter
BCF/OFF
A-33/Nov 69/101
On Loan Only

Systematics and Nomenclature of Gudgeons of the Subfamily Gobioninae in the Amur Basin, by P. Banarescu, T. Nalbant.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1968, pp 628-636.
Dept of Inter
BCF/OFF
A-33/Nov 69/100
On Loan Only

The Many Gill-raker Sig (Whitefish) of Lake Oron in the Vitim River Basin, by Yu. Ye. Kalashnikov.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1968, pp 637-645.
Dept of Inter
BCF/OFF
A-33/Nov 69/42
On Loan Only

Comparative Examination of the Fertilities of Vimba and Chalcalburnus, Acclimatized in the Sengilev Reservoir, District of Stavropol, by L. P. Astanin, L. I. Samanava.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1968, pp 646-652.
Dept of Inter
BCF/OFF
A-33/Nov 69/89
On Loan Only

Dimensions, Biochemical Characteristics and Caloric Values of Mature Eggs of Members of the Genera Oncorhynchus and Salmo, by A. I. Smironov, M. S. Kamyshnaya.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1968, pp 653-661.
Dept of Inter
BCF/OFF
A-33/Nov 69/95
On Loan Only

Reproduction of the Sablefish, by L. S. Kodolov.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1968, pp 662-668.
Dept of Inter
BCF/OFF
A-33/Nov 69/93
On Loan Only

Survival of Herring Eggs and Larvae on the White Sea Spawning Grounds During a Period of Massive Spawning, by L. A. Galkina.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1968, pp 679-688.
Dept of Inter
BCF/OFF
A-33/Nov 69/50
On Loan Only

Accumulation of Strontium-90 and Yttrium-90 Dissolved in the Water and Its Effect on the Embryonic Development of Loach, by I. A. Shekhanova, V. L. Pechkurenkov.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1968, pp 689-701.
Dept of Inter
BCF/OFF
A-33/Nov 69/92
On Loan Only

Comparative Study of the Growth and Feeding Habits of the Anchovy in the Atlantic Ocean and Mediterranean Basin, by N. Ya. Lipskaya.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1968, pp 702-709.
Dept of Inter
BCF/OFF
A-33/Nov 69/1
On Loan Only

Structure of the Digestive Tract in Distichodus niloticus (L.) and Distichodus rostratus (Gunth.) in Relation to the Nature of Food, by I. A. Verigina, Yu. I. Medani.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1968, pp 710-721.
Dept of Inter
BCF/OFF
A-33/Nov 69/27
On Loan
Only

Dynamics of Weight, Nutritional State and Body Length of Tilapia mossambica Peter Reared on Canular, Chlorella-containing Feed, by L. M. Antsyshkina, N. S. Kirilenko.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1968, pp 722-727.
Dept of Inter
BCF/OFF
A-33/Nov 69/41
On Loan Only

Distribution and Migration at Sea of the Local Stock from Kurile Lake of Red Salmon, by I. B. Birman, S. M. Kononov.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1968, pp 728-736.
Dept of Inter
BCF/OFF
A-33/Nov 69/94
On Loan Only

Blood Serum Proteins of Pike-perch Populations of the Don and Kuban Rivers, by N. N. Litvinova.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1968, pp 737-741.
Dept of Inter
BCF/OFF
A-33/Nov 69/24
On Loan Only

The European Eel in Azerbaidzhan Waters, by Yu. I. Abdurakhmanov, Z. M. Kuliyeu.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1968, pp 742-745.
Dept of Inter
BCF/OFF
A-33/Nov 69/40
On Loan Only

New Observations on the Distribution of Electrona rissoi (Cocco) and Disphus Ostenfeldi Taning (Myxophidae), by I. A. Trunov.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1968, pp 745-748.
Dept of Inter
BCF/OFF
A-33/Nov 69/57
On Loan Only

Features of Ovogenesis in the Pike-perch and Bream of the River Danube, by A. M. Kukuradze.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1968, pp 751-756.
Dept of Inter
BCF/OFF
A-33/Nov 69/43
On Loan Only

Sphincter-like Mechanisms in Intrarenal Veins in Some Fishes, by Kh. G. Valeyeva.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1969, pp 756-760.
Dept of Inter
BCF/OFF
A-33/Nov 69/26
On Loan Only

Effects of Effluents from Metallurgical and Metal-working Industries on the Food of Fishes in Rivers and Reservoirs, by A. K. Dyga, V. I. Zolotareva.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1968, pp 761-764.
Dept of Inter
BCF/OFF
A-33/Nov 69/118
On Loan Only

Plenary Meeting of Scientific Council on Hydrobiology, Ichthyology and Utilization of Biological Resources of Bodies of Water, by B. G. Ioganzen.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 4(51), 1968, pp 772-774.
Dept of Inter
BCF/OFF
A-33/Nov 69/114
On Loan Only

Effect of Cortisone on Thymidine- and Thymidylate-Kinase Activity of Regenerating Liver of Rats, by A. D. Ol'shanetskaya.
RUSSIAN, per, Vop Med Khim, Vol 13, No 4, 1967, pp 432-433.
HEW NIH
10-20-69

The Beginning of Adenomas in Organ Cultures of Embryonic Lung Tissue of Mice, by T. S. Kolesnichenko, RUSSIAN, per, Vop Onkol, Vol 12, No 12, 1966, pp 39-47.
HEW NIH
11-12-69

Propagation of 4 Group-A Arboviruses in Continuous Cells of Hamster Embryo Kidney Epithelium (VNK-21), by B. F. Semenov.
RUSSIAN, per, Voprosy Virusologii, 1966, pp 214-217.
*ACSI-J-7816

Cytopathic Effect of the Rabies Street Virus, by M. A. Selimov.
RUSSIAN, per, Vop Virus, No 5, 1966, pp 602-603.
HEW NIH
10-19-69

Arbovirus Infections of Monkeys Captured in the Jungles of Northern Nigeria, by B. F. Semenov.
RUSSIAN, per, Voprosy Virusologii, 1967, pp 755-757.
*ACSI-J-7830

Method of Increasing Hemagglutinating and Infective Activity of a Number of Arboviruses in Tissue Culture, by A. I. Rejepova.
RUSSIAN, per, Voprosy Virusologii, 1968, pp 618-623.
*ACSI-J-7831

Cultivation of Viruses in Suspended Cell Cultures, by A. S. Novokhatskiy.
RUSSIAN, per, Voprosy Virusologii, 1968, pp 643-649.
*ACSI-J-7829

Prophylaxis of Influenza by Stimulators of Interferon Formation, UV Virus and Prodigiozan, by N. M. Furer.
RUSSIAN, per, Vop Virus, No 3, 1969, pp 277-281.
HEW NIH
11-11-69

New Antigens Produced in Virus-Infected Cells, by P. N. Kosyakov, R. A. Charchoglyan, 11 pp.
RUSSIAN, per, Voprosy Virusologii, Moscow, Sept-Oct 1969, pp 518-525.
JPRS 49530

Electron Microscope Study of Chikungunya Virus Multiplication in BHK-21 Cell Cultures, by V. M. Borisov, V. Ya. Karmysheva, 7 pp.
RUSSIAN, per, Voprosy Virusologii, Moscow, Sept-Oct 1969, pp 541-546.
JPRS 49530

Introduction to Abnormal Psychology, by B. V. Zeigamik. 172 pp.
RUSSIAN, bk, Vvedenie v Patu-Psikhologiyu, 1969, CONSULTANTS BUREAU/PLENUM PRESS

Soviet Comment on Doctor Shortage in Latin America, by A. P. Il'nitskiy, 5 pp.
RUSSIAN, per, Zdravookhraneniye Rossiyskoy Federatsii, Moscow, Oct 1969, pp 32-35.
JPRS 49329

Duration of Immunity in Monkeys Inoculated with a Complex Preparation Against Anaerobic Infections, by I. A. Larina.
RUSSIAN, per, Zh Mikrobiol, Vol 45, No 2, 1968, pp 57-59.
HEW NIH
11-21-69

Electric Manifestations of Cerebral Activity of the Cat at the Transition From the Wakeful State to Sleep, by L. A. Fedotova.
RUSSIAN, per, Zh Vyssh Nervdeiat Pavlov, Vol 19, No 3, 1969, pp 537-539.
HEW NIH
11-10-69

On Polychaeta-fauna of Arctic and Antarctic, by P. V. Ushakova.
RUSSIAN, per, Zoologicheskii Zhurnal, Vol 34, No 11, 1957, pp 1659-1672.
Dept of Inter
BCF/OFF
A-33/Nov 69/127
On Loan Only

The Acoustic Signal and Signalling System in Small Animals, by G. N. Simkin. 11 pp.
RUSSIAN, per, Zoologicheskii Zhurnal, No 4, 1969, pp 579-586.
ACSI-J-6956
ID 2204004969

Vision and Proximal Orientation of Fishes, by V. P. Protasov, 205 pp.
RUSSIAN, bk, Zrenie i blizhnaya Orientatsiya Ryb, 1968
*CFSTI TT 70-50065

Backwardness of Medical Care in Libya Under-scored, by Mohammad al-Tariki, 7 pp.
ARABIC, per, Ar-Raid, Tripoli, 25 Oct 1969, pp 3, 4.
JPRS 49436

Growth of Psychiatric, Neurological Care Traced, by G. Uzunov, 9 pp.
BULGARIAN, per, Nevrologiya, Psikhatriya i Nevrokhirurgiya, Sofia, No 4, 1969, pp 281-287.
JPRS 49522

Advances Noted in Control of Animal Diseases, by Ivan Chenchov, 8 pp.
BULGARIAN, per, Selskostopanska Nauka, Sofia, No 3, 1969, pp 97-103.
JPRS 49443

Problems of Wartime X-Ray Service Discussed, by M. Yunashkov, D. Raynovski, 5 pp.
BULGARIAN, per, Voennomeditsinsko Delo, Sofia, No 5, 1969, pp 3-6.
JPRS 49485

Tuberculosis More Severe in Construction Troops, by I. Ilchev, V. Khristov, 5 pp.
BULGARIAN, per, Voennomeditsinsko Delo, Sofia, No 5, 1969, pp 51-54.
JPRS 49485

Communist China's Chemical, Pharmaceutical Industries Analyzed, by Lu Yun, 8 pp.
CHINESE, per, Chung-kung Yen-chiu, Taipei, 10 Aug 1969, pp 110-114.
JPRS 49379

Transfusion of Human Leukocytes. II. The Question of the Responsibility of the Physician When Performed in Clinical Practice, by E. Dobry.
CZECH, per, Cas Lek Cesk, No 105, 1966, pp 1090-1091.
HEW NIH
10-26-69

Problems of Noise and Its Effect on Hearing, by F. Singer.
CZECH, per, Ceskoslovenska Otolaryngologie, Vol 17, No 1, 1968, pp 13-21.
*ACSI-J-7897
ID 2204000470

New Uses of Activation Analysis in Biochemistry, by Miloslav Rakovic.
CZECH, per, Chemicke Listy, vol. 63, No. 6, 1969, pp. 679-691.
*CFSTI TT 70-56013

Safety at Work, Health Problems Discussed, 7 pp.
CZECH, np, Hospodarske Noviny, Prague, 7 Nov 1969, p 7.
JPRS 49380

Application of Radioisotopes and Ionizing Irradiation in Food Industries, by Libuse Holecckova, Frantisek Bartonicek, 6 pp.
CZECH, per, Prumysl Potraviny, Vol 19, No 8, pp 388-392.
ARM/FSTC/HT-23-429-68

Serum Phenytonin Concentration in Ambulatory Epilepsy Patients, by R. S. Jorgensen.
DANISH, per, Ugeskr Laeg, No 126, 1964, pp 211-214.
HEW NIH
11-13-69

Air Regeneration in Sealed Environments, a Literature Survey, by P. Sluimer.
DUTCH, rpt, Mar 1968, 40 pp.
*NASA TT F-12,841

Transient Deafness. A Rare Complication of Ethacrynic Acid Therapy, by J. A. Paloheimo.
FINNISH, per, Duodecim, No 84, 1968, pp 48-50.
HEW NIH
10-30-69

Pathology of Deglutition in Pediatrics. I. Congenital Anomalies and Deglutition Disorders, by B. Gaudier.
FRENCH, per, Acta Paediat Belg, Vol 18, No 1, 1964, pp 5-29.
HEW NIH
10-33-69

Disorders of Deglutition in Pediatrics. II. Neurological Diseases and Disorders of Deglutition, by B. Gaudier.
FRENCH, per, Acta Paediat Belg, Vol 18, No 2, 1964, pp 61-90.
HEW NIH
11-3-69

Biological Effect of Low Magnetic Field Environments, by L. Miro. 6 pp.
FRENCH, rpt, Action Biologique des Ambiances a Faible Champ Magnetique.
NASA TT F-12,691

Transfusions of Leukocytes, by A. Levacher.
FRENCH, per, Actualities Hematol, No 2, 1968, pp 52-59.
HEW NIH
10-23-69

Resistance of Catfish to Sudden Temperature Changes, by N. Charlon.
FRENCH, per, Bulletin Francais de Pisciculture, Vol. 41, No. 231, 31 Dec. 68, pp. 41-51.
*CFSI TT 70-58025

Polygraphic Study of Sleep in the Pig, by Y. Ruckebusch.
FRENCH, per, C R Soc Biol, Vol 162, No 7, 1968, pp 1346-1354.
HEW NIH
10-7-69

Adjustment of an Acellular System of Oviduct of Laying Hen, by P. Gerlinger.
FRENCH, per, C R Soc Biol, Vol 162, No 12, 1968, pp 2295-2298.
HEW NIH
10-34-69

The Olfactory Threshold, by J. T. Davies.
FRENCH, per, Mem Serv Chim Etal, No 41, 1956/57, pp 359-362.
HEW NIH
11-9-69

The Olfactory Molecules are Believed to Act Through Their Shape and Size, by J. Grive.
FRENCH, per, Nature, No 3343, 1963, pp 451-452.
HEW NIH
10-32-69

Utilization of Tritiated Thymidine and Cytidine for the Study of the Turnover and Metabolism of Human Lymphocytes, by T. M. Fliedner.
FRENCH, per, Nouv Rev Franc Hemat, Vol 8, No 5, 1968, pp 613-624.
HEW NIH
10-28-69

Labeling with Chromium 51 in Normal Subject and Chronic Lymphoid Leukemia, by H. Pfisterer.
FRENCH, per, Nouv Rev Franc Hemat, Vol 8, No 5, 1968, pp 637-642.
HEW NIH
10-29-69

Leukemogenic Viruses, by M. Boiron, A. Hampe, 15 pp.
FRENCH, per, Pathol Biol, Vol 16, No 1-2, 1968, pp 87-92.
AEC/ORNL-Tr-2242

Symptomatic Treatment of Agranulocytosis by Transfusions of Leukocytes, by L. Schwarzenberg.
FRENCH, per, Presse Med, Vol 74, No 21, 1966, pp 1057-1060.
HEW NIH
10-21-69

Resistance of the Human Body to High Accelerations of Short Duration, by Seris.
FRENCH, rpt, Proceedings Association Pour le Developpement des Sciences et Techniques de L'Environnement, French Conference in Environmental Studies, Ecole Nationale Supérieure de L'Aéronautique, Paris, 31 Mar-1 Apr 1969, pp 97-103.
*NASA TT F-12,828

Graft of Allogenic Bone Marrow in Man Demonstrated by Six Antigenic Markers After Conditioning of the Recipient and the Donor With Antilymphocytic Serum, by G. Mathe.
FRENCH, per, Rev Franc Etud Clin Biol, Vol 13, No 10, 1968, pp 1025-1027.
HEW NIH
10-24-69

Huenfeld-Hensen Pictures of Amphibian Erythrocytes, by F. Meves.
GERMAN, per, Anat Anz, Vol 24, No 18, 1904, pp 465-476.
HEW NIH
10-35-69

Significance of Anisotropy and Homogeneity for the Determination of the Elasticity of Blood Vessels, by Victor Hardung. 17 pp.
GERMAN, per, Angiologica, Vol 1, No 2, 1964, pp 141-155.
NASA TT F-12,608

The Inflammatory Diseases of the Meninges, by M. Schaer, E. Wiesmann.
GERMAN, per, Bibliotheca Tuberculosea, Vol 23, 1967, pp 1-11.
Dept of Navy NIC Tran 2940

Legal, Medical and Ethical Problems in Establishing Death, by O. Pribilla.
GERMAN, per, Dtsch Aerztbl, Vol 65, No 41, 1968, pp 2256-2259, No 42, pp 2318-2322, No 43, pp 2396-2398.
HEW NIH
11-1-69

Classification and Evaluation of Margarine in Relation to Food Law Requirements, by R. Ristow. 7 pp.

GERMAN, per, Deutsche Lebensmittel-Rundschau, Vol 63, No 4, 1967, pp 115-117.

Dept of Inter

BCF/OFF

A-33/Nov 69/130

On Loan Only

Octacalcium Phosphate in Dental Enamel and its Relationship to Caries, by R. Quicker.

GERMAN, per, Dtsch Zahnarztl, No 22, 1967, pp 1487-1491.

HEW NIH

10-11-69

On the Systematics and Ecology of the Turbellarian Genus: Paromalostomum. (Investigations the Sandy Beach of the North Sea Island Sylt), by R. Pawlak. 18 pp.

GERMAN, per, Helgolander Wiss Meeresinters, Vol 19, No 3, 1969, pp 433-452.

Dept of Inter

BCF/OFF

A-33/Nov 69/75

On Loan Only

Investigation on the Influence of Mold Fungi on Flakeboards and Wood Particles Boards, by Waltraut. 23 pp.

GERMAN, per, Material und Organismen, Vol 2, No 4, 1968, pp 289-316.

ACSI-J-7152

FSTC-HT-23-041-70

On the General Effects of Cocaine, by S. Freud.

GERMAN, per, Med Chir Cbl, Vol 20, No 32, 1885, pp 374-375.

HEW NIH

10-13-69

Experimental Contributions to the Study of Catatonic Dilation of the Pupil, by O. Loewenstein.

GERMAN, per, Mdschr Psychiat Neurol, No 47, 1920, pp 194-215.

HEW NIH

11-15-69

Physical, Chemical and Micromorphological Behaviour of Enamel After Treatment with Inorganic and Amine Fluorides, by H. R. Muehleemann.

GERMAN, per, Schweiz Mschr Zahnheilk, Vol 77, No 3, 1968, pp 230-248.

HEW NIH

10-6-69

Development, Present Status and Proposals for the Improvement of Caries Prophylaxis with Fluoridated Salt in Switzerland, by H. J. Wespi.

GERMAN, per, Schweiz Mschr Zahnheilk, Vol 78, No 7, 1968, pp 651-658.

HEW NIH

10-3-69

Water or Salt Fluoridation? A Contribution to the Problem of the Daily Fluoride Requirement, by K. Toth.

GERMAN, per, Schweiz Mschr Zahnheilk, Vol 78, No 8, 1968, pp 752-765.

HEW NIH

10-2-69

GDR Using Electric Shock in Deep Sea Fishing, by F. Hartung. 15 pp.

GERMAN, per, Seewirtschaft, Leipzig, Nov 1969, pp 904-908.

JPRS 49450

Metabolism and Toxicity of Therapeutic Chelating Agents, Report No 1: Comparative Investigation on the Excretion of EDTA and DTPA in the Urine of the Rat, by Anna-Elisabeth Harmuth-Hoene, 20 pp.

GERMAN, per, Strahlentherapie 134, 1967, pp 110-122.

AEC-Tr-7090

Metabolism and Toxicity of Therapeutic Chelating Agents, Report No 5: The Physiological Dilution Space of EDTA and DTPA, by Felicitas Bohne, Anna-Elisabeth Harmuth-Hoene, 16 pp.

GERMAN, per, Strahlentherapie 136, 1968, pp 609-616.

AEC-Tr-7089-69

Metabolism and Toxicity of Therapeutic Chelating Agents, by K. M. Weber.

GERMAN, per, Strahlentherapie, Vol 137, 1969, pp 708-711.

*AEC-Tr-2924

Ultrastructure of the White Spleen Pulp of Germ-Free, Normal and Immune Mice, by C. Jerusalem.

GERMAN, per, Verh Anat Ges, No 61, 1966, pp 157-167.

HEW NIH

10-8-69

Clinical and Bioptic Studies of Blood Donors

Elevated Serum Transaminases, by H. J. Severidt. GERMAN, per, Verh Dtsch Ges Inn Med, No 74, 1968, pp 604-606.

HEW NIH

11-20-69

Investigations on the Geomicrobiology of Lignite.
Part 1, by H. Jaschhof, W. Schwartz. 21 pp.
GERMAN, per, Zeit fuer Alleg Mikrobiologie,
Vol 9, No 2, 1969, pp 103-119.
ACSI-J-7449
FSTC-HT-23-235-70

Deleterious Effects of EDTA and DTPA on the
Intestine of the Rat, by K. M. Weber.
GERMAN, per, Z. Gesam Exp. Med., Vol 150, 1969,
pp 354-360.
*AEC-Tr-2925

Investigation of Sugar Metabolism in Humans.
Part 1: The Reaction of Blood Sugar to the
Peroral Supply of a Small Dose of Glucose,
by H. Staub. 16 pp.
GERMAN, per, Zeit Klin Med, Vol 21, 1921,
pp 41-50.
NASA TT F-12,472

Inhalation Experiments with Radioactive Zirconium
with and without Additional Carrier Product in
the Guinea Pig, by Irene Schmidtke.
GERMAN, per, Zentrabl Biol Aerosol Forsch,
Vol 11, No 5, 1964, pp 397-419.
*AEC

Production of Fruit and Vegetable Powder, by
Demeczky Mihaly.
HUNGARIAN, per, Elelmezési i Par, Vol 22,
No 12, 1968, pp 358-364.
*ACSI-J-7822
*FSTC-HT-23-593-70

Ultrastructure and Nature of the Hyaline Fibrous
Tissue After Granuloma From Freund's Adjuvant.
II. Electron Microscope Studies, by A. Bairati.
ITALIAN, per, Boll Soc Ital Biol Sper, No 4, 1969,
pp 1443-1444.
HEW NIH
11-18-69

The Method of Tongue Impressions in the Study of the
Normal and Pathological Tongue, by A. Colli.
ITALIAN, per, G Clin Med, No 35, 1954, pp 157-172.
HEW NIH
11-2-69

On the Presence and Meaning of Anti-I and Anti-II
Antibodies in Multitransfused Patients Afflicted
by Cooley's Disease, by C. Menini.
ITALIAN, per, Minerva Chir, No 24, 1969, pp 511-517.
HEW NIH
11-4-69

Transfusion of Leucocytes, by C. Sacchetti.
ITALIAN, per, Riv Emoter Immunemat, No 13, 1966,
pp 77-101.
HEW NIH
11-14-69

The Age-determination, Growth and Maturity of
the Deep-sea Smelt in the Japan Sea, by
Mio Shin-ichi. 34 pp.
JAPANESE, per, Nichi Sui Ken Hokoku, No 21,
1969, pp 1-16.
Dept of Inter
BCF/OFF
A-33/Nov 69/98
On Loan Only

Committee of Consolidated Investigations: Reports of
Explosive Outbreaks of Epidemic Diarrhea in the
Rural Districts of Hokkaido in 1951.
JAPANESE, per, Sapporo Igaku Z, Vol 4, No 3, 1953,
pp 163.
HEW NIH
10-15-69

Reports of Explosive Outbreaks of Epidemic Diarrhea
in the Rural Districts of Hokkaido, Japan in 1951.
I. Epidemiological Studies, by M. Kanamitsu.
JAPANESE, per, Sapporo Igaku Z, Vol 4, No 3, 1953,
pp 164-170.
HEW NIH
10-16-69

Reports of Explosive Outbreaks of Epidemic Diarrhea
in the Rural Districts of Hokkaido in 1951. II.
Etiology: Bacteriological Examinations and Trans-
mission of Infection to Human Volunteers, by H. Uetake
JAPANESE, per, Sapporo Igaku Z, Vol 4, No 3, 1953,
pp 171-177.
HEW NIH
10-17-69

Reports of Explosive Outbreaks of Epidemic Diarrhea
in the Rural Districts of Hokkaido in 1951. III.
Clinical Observations, by T. Ise.
JAPANESE, per, Sapporo Igaku Z, Vol 4, No 3, 1953,
pp 178-181.
HEW NIH
10-18-69

Studies on the Lipids of Japanese Littleneck,
Tapes japonica Deshayes. III. On the Ceramide
2-aminoethylphosphonate, by Shigejiro Yasuda.
7 pp.
JAPANESE, per, Yukagaku, Vol 18, No 5, 1969,
pp 239-241.
Dept of Inter
BCF/OFF
A-33/Nov 69/111
On Loan Only

New View Points on the Physiology and Toxicology of Fluorides, by A. R. Hagen.
NORWEGIAN, per, Norske Tannlaegeforen Tid, No 77, 1967, pp 469-486.
HEW NIH
10-9-69

Marine Accidents in the Fishing Fleet. Part II- Accidents at Work on Board, by I. Bulski. 8 pp.
POLISH, per, Biuletyn Zjednoczenia Gospodarki Rybnej, Vol 5, No 6(48), 1968, pp 77-81.
Dept of Inter
BCF/OFF
A-33/Nov 69/85
On Loan Only

Prawn Catches on Georges Bank, by F. Bucki
POLISH, per, Technika i Gospodarka Morska, Vol. 19, no. 5 (215), May, 1969, pp. 210-214
*CFSTI TT 70-55013

Biology and Catches of Jack Mackerel off West Africa, by J. Wojciechowski.
POLISH, per, Technika i Gospodarka Morska, Vol. 19, No. 6 (216) June, 1969, pp. 267-270
*CFSTI TT 70-55015

Hake Tastes Like Trout, by J. Maciejczyk. 5 pp.
POLISH, per, Tygodnik Morski, Vol 11, No 29, 1968, pp 3.
Dept of Inter
BCF/OFF
A-33/Nov 69/105
On Loan Only

Radiation-induced Changes in Medical Personnel Working with X-rays, by D. Jarczyk.
POLISH, per, Wiadomosci Lekarskie, Vol 21, No 9, 1968, pp 770-774.
*ACSI-J-7884
ID 2204000170

General Geography of Plants, by Wladyslaw Szafer, 171 pp.
POLISH, bk, Zarys Historii Botaniki w Krakowie na tle szesciu wiekow Uniwersytetu Jagiellonskiego, 1964
CFSTI TT 67-56117

Action of High-Frequency Currents on the Body, by T. Plesca.
RUMANIAN, per, Medicina Interna, Vol 20, 1968, pp 41-47.
*ACSI-J-7885
ID 2204000270

Contribution to the Study of Pediculoides Ventrucosus Newport (Acarina Arachnoidea), by Pavle Vukasovic, 35 pp.
SERBO-CROATIAN, bklt, Prilog Proucavanju Pediculoides Ventrucosus Newport (Acarina, Arachnoidea), 1947
CFSTI TT 68-50104

Newer Analytical Methods in Chemical Toxicological Testing Described, by Dusan Jovanovic, Branislav Tokovic, 7 pp.
SERBO-CROATIAN, per, Vojnosanitetski Pregled, Belgrade, Sept 1969, pp 471-480.
JPRS 49428

Hygienic-Epidemiological Detachment Described, by Metodije Dimitrijevic, 9 pp.
SERBO-CROATIAN, per, Vojnosanitetski Pregled, Belgrade, Sept 1969, pp 472-476.
JPRS 49412

The Idiopathic Respiratory Distress Syndrome of the Newborn. New Interpretation of the Pathogenesis, by A. M. J. Lisboa.
SPANISH, per, Pediatr Prat, Vol 36, No 4, 1965, pp 137-146.
HEW NIH
11-16-69

Fluoridation of Salt in Four Colombian Cities. Report of the Investigation, by R. Mejia Villa.
SPANISH, per, Rev Cent Amer Odont, No 5, 1968, pp 30-34.
HEW NIH
11-17-69

Articles on Narcotics.
SWEDISH, per, Lakartidningen, Vol 66, No 48, Nov 1969, pp 4984-4988, 4989-4991, 5006-5020, 5021-5024.
*ACSI-J-7846
ID 2204008969

Medical College Research Results Reviewed, by Nguyen Thanh, 5 pp.
VIETNAMESE, per, Tin Tuc Hoat Dong Khoa Hoc, Hanoi, No 7, 1969, pp 43-44.
JPRS 49428

Second Conference on Plant Physiology Held, by Le Duc Dien, 6 pp.
VIETNAMESE, per, Tin Tuc Hoat Dong Khoa Hoc, Hanoi, No 7, 1969, pp 49-51.
JPRS 49428

Malaria Conference of Coastal Regions Held,
by Vu Khai, 7 pp.
VIETNAMESE, per, Y Hoc Thuc Hanh, Hanoi, No 160,
1969, pp 8-10.
JPRS 49489

Symptoms of Hemorrhagic Fever; Treatment Presented,
6 pp.
VIETNAMESE, per, Y Hoc Thuc Hanh, Hanoi, No 160,
1969, pp 19-21.
JPRS 49489

Some Cases of White Phosphorus Burns Presented,
by Le The Trung, 9 pp.
VIETNAMESE, per, Y Hoc Thuc Hanh, Hanoi, No 160,
1969, pp 24-27.
JPRS 49489

How to Treat Glass Injuries in Eyeball, by
Nguyen Trong Nhan, 6 pp.
VIETNAMESE, per, Y Hoc Thuc Hanh, Hanoi, No 160,
1969, pp 28-29.
JPRS 49489

Chemistry

Biochemistry of Molybdenum, by Ya. V. Peyve.
RUSSIAN, per, Agrokimiya, No 1, 1969, pp 61-74.
HEW NIH
11-5-69

N-(Fluoro-2, 2-Dinitroethyl)-N-Nitroamino-Alcohols
and some of their Derivatives, by L. T. Yeremenko,
D. A. Nesterenko, 15 pp.
RUSSIAN, rpt, Akad Nauk SSSR, Order of Lenin Inst.
Chem Phy, 1969.
AEC/UCRL-Tr-10390-69

Synthesis and Properties of Fluoronitro-Alcohols,
III: 4-Fluoro-2,2,4,4-Tetranitrobutan-1-OL,
Some of its Ethers, Esters and Reactions, by
L. T. Yeremenko, G. V. Oreshko, 14 pp.
RUSSIAN, rpt, Akad Nauk SSSR, Order Lenin Institute
of Chem Phy, 1969.
AEC/UCRL-Tr-10389-69

Calculation of the Kinetics of Ammonia Radiolysis
in the Gas Phase I. Hydrazine Yield as a Function
of Dose and Dose Rate, by B. G. Dzantiev,
G. V. Nichipor, 12 pp.
RUSSIAN, rpt, All-Union Institute of Scientific
and Technical Information 685-69, 1969.
AEC/ANL-Tr-784-69

Calculation of the Kinetics of Ammonia Radiolysis
in the Gas Phase II. Hydrazine Yield as a Function
of Temperature and Pressure, by B. G. Dzantiev,
G. V. Nichipor, 15 pp.
RUSSIAN, rpt, All-Union Institute of Scientific
and Technical Information, No 686-69, 1969.
AEC/ANL-Tr-785-69

Calculation of the Kinetics of Ammonia Radiolysis
in the Gas Phase III. Stationary Hydrazine Yield
in the Radiolysis of Ethylene-Ammonia Mixtures,
by B. G. Dzantiev, G. V. Nichipor, 10 pp.
RUSSIAN, rpt, All-Union Instit of Sci Tech Infor-
mation, No 687-69, 1969.
AEC/ANL-Tr-786-69

Scientific-Research Work in the Field of
Additive Chemistry, by A. M. Kuliyeu, 7 pp.
RUSSIAN, per, Azerbaydzhanskiy Khimicheskiy
Zhurnal, No 3, 1967, pp 23-27.
AIR/FTD/HT-23-897-68

Chemical Lasers of High Pressure and Light-
Stimulated Chemical Reactions, by S. I. Pekar.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol 187, No 3,
1969, pp 555-557.
*Dept of Navy APL/JHU J-1425

Influence of Alloying Elements on the Dislocation
Structure of Chromium, by G. G. Kurdyumova.
RUSSIAN, bk, Fizicheskaya Priroda Plasticheskoy
Deformatsiy i Razrusheniya Metallov, 1969,
pp 24-37.
*NASA TT F-12,819

Investigations of the Problem of Chromium,
by V. M. Gridnev, 23 pp.
RUSSIAN, bk, Fiziko-Khimicheskiye Issled
Zharoprochnykh Splavov, 1968, pp 154-171.
NASA TT F-12,556

Possibility of Xenon Compounds Synthesis Under
Natural Conditions, by Yu. Gusev, V. K. Usopov,
9 pp.
RUSSIAN, per, Gekkhimiya, No 7, 1969, pp 835-839.
AEC/ANL-Tr-783-69

Kinetics and Mechanism of Thermo-decomposition
of Silver Sulphate, by M. P. Gilevich,
RUSSIAN, bk, Geterogennye Khim Reaktsiy, 1961,
pp 31-41.
*NASA TT F-12,539

Heterogeneous Chemical Reactions. Approx 194 pp
RUSSIAN, bk, Geterogennye Khimicheskie Reaktsii,
1970.
CONSULTANTS BUREAU/PLENUM PRESS

Heterogeneous Processes of Geochemical Migration, by V. S. Golubev, A. A. Garibayants. 191 pp.

RUSSIAN, bk, Geterogennyye Protsessy Geokhimi-cheskoi Migratsii, 1968.

CONSULTANTS BUREAU/PLENUM PRESS

Synthesis and Investigation of Polyimides Based on a Benzene and Maleic Anhydride Adduct, by S. R. Rafikov. 5 pp.

RUSSIAN, per, Izv Ak Nauk Kaz SSR, Ser Khim, Vol 18, No 6, 1968, pp 51-55.

NASA TT F-12,589

A Study of the Reaction of Dioxigen Difluoride With Higher Fluorides of Certain Elements, by D. V. Bantov, V. F. Sukhovetkhov, et al. 7 pp.

RUSSIAN, per, Izvestiya AN SSSR, Sibirskoye Otdeleniye. Seriya Khimicheskikh, No 1, 1968, pp 84-87.

AIR/FTD/MT-24-148-69

Synthesis of Grafted Copolymers of Modified Polyoacrylonitrile and Production of Fibers Based on Them, by M. P. Pan'kova, A. A. Konkin. 10 pp.

RUSSIAN, rpt, Karbotsepyne Volokna, 1966, pp 54-61.

AIR/FTD/HT-23-384-69

Catalysis in Analytical Chemistry, by K. B. Yatsimirskiy, L. P. Tikhonova. approx. 88 pp.

RUSSIAN, bk, Kataliz v Analiticheskoi Khimii, 1970.

CONSULTANTS BUREAU/PLENUM PRESS

Effect of the Metal Support on Photolysis of an Adduct with Urethane and Isocyanate Groups, by N. P. Kurgan. 8 pp.

RUSSIAN, per, Kiev-Naukova Dumka, No 5, 1968, pp 212-218.

ARM/FSTC/HT-23-414-69

New Methods for the Synthesis of Thermostable Polymers, by A. L. Rusanov. approx 128 pp.

RUSSIAN, bk, Novye Metody Sintaza Termostoikikh Polimerov, 1970.

CONSULTANTS BUREAU/PLENUM PRESS

Azeotropic Rectification of a Mixture of Silicon Tetrachloride With Trimethylchlorosilane in the Presence of Acetonitrile, by T. P. Korablina, Yu. K. Moldanov, et al. 10 pp.

RUSSIAN, per, Plasticheskiye Massy, No 11, 1966, pp 22-25.

AIR/FTD/HT-23-959-68

Investigation of Europium Complexes with some β -Diketones, by V. Ya. Temkina, T. N. Bolotnikova. 6 pp.

RUSSIAN, per, Promyshlennost Khim Reaktivov i Osobo Chistyykh Veshchestv, No 8, 1967, pp 136-139.

AEC/UCRL-Tr-10409-69

Refractometry in Organic Chemistry, by B. V. Ioffe. approx. 272 pp.

RUSSIAN, bk, Refraktometriya v Organicheskoi Khimii, 1971.

CONSULTANTS BUREAU/PLENUM PRESS

Synthesis of Ditertiary Acetylene γ -Glycols of the Ferrocene Series, by I. M. Gverdtsiteli, L. P. Asatiani. 5 pp.

RUSSIAN, per, Sobremenniya AN GRUZSSR, Vol 51, No 1, 1968, pp 91-94.

AIR/FTD/HT-23-425-69

Anodic Process of Formation of Oxide Films on Aluminum, Magnesium and Titanium as Revealed by the Tagged Atom Method Data, by A. F. Bogoyavlensky. 6 pp.

RUSSIAN, per, Trudy Kaz Aviats Inst, Ser Khim, No 90, 1966, pp 3-7.

NASA TT F-12,591

Application of Infrared Spectroscopy to the Study of the Process of Thermal Dehydration of Mono-substituted Phosphates of Magnesium and Calcium, by V. V. Pechkovskiy, L. N. Shchegrov, et al. 8 pp.

RUSSIAN, per, Vestsi. AN BSSR. Seriya Khimichnykh Nauk, No 1, 1968, pp 36-40.

AIR/FTD/HT-23-339-69

The Development of the Chemical Industry in the Ukraine, by G. I. Vilasov. 10 pp.

RUSSIAN, per, Ukrainskiy Khimicheskii Zhurnal, Vol 33, No 11, 1967, pp 1121-1126.

AIR/FTD/HT-23-908-68

Summaries of Science - Electrochemistry, 1965.

RUSSIAN, bk, Vsesoyuznyy Institut Nauchnoy i Tekhnicheskoy Informatsiy, 230 pp.

*CFSTI TT 70-50034

Summaries of Science - Electrochemistry, 1966.

RUSSIAN, bk, Vsesoyuznyy Institut Nauchnoy i Tekhnicheskoy Informatsiy, 146 pp.

*CFSTI TT 70-50035

Degradation of Polymer Chains During an Induction Period of Inhibited Oxidation, by B. A. Gromov, V. B. Miller, et al. 6 pp. RUSSIAN, per, Vysokomolekulyarnyye Soyedineniya. Seriya B. Kratkiye Soobshcheniya, Vol 9, No 5, 1967, pp 352-355.

AIR/FTD/HT-23-961-68

Photolysis of Certain Precursors of Nucleic Acids in the Presence of Polyphosphoric Acid, by Ye. M. Lapinskaya. 8 pp. RUSSIAN, per, Zh Evolyutsionnoy Biokhim i Fiziol, Vol 5, No 1, 1969, pp 10-15. NASA TT F-12,571

The Thermodynamic Properties of Potassium-Antimony Compounds, by V. G. Voronin, T. Sh. Nguyen, et al. 8 pp. RUSSIAN, per, Zhurnal Fizicheskoy Khimii, Vol 41, No 11, 1967, pp 2978-2981. AIR/FTD/HT-23-1198-68

Mass-Spectrometric Determination of Composition and Vapor Pressure of Molybdenum Trioxide, by Ye. K. Kazenas, Yu. B. Tsvetkov, 5 pp. RUSSIAN, per, Zh Neorganicheskoy Khimii, No 1, 1969, pp 11-13. AEC/SC-Tr-1050-69

Study on Pyrolysis of Polymethyl Methacrylate by Differential Thermal Analysis, by Shih-K'ang Wu, Hsien Chang, et al. 3 pp. CHINESE, per, Hua Hsueh T'ung Pao, No 12, 1962, p 48. AIR/FTD/HT-23-1300-68

Various Aspects of Chemical Fibers, by Pai-jung Fang. 9 pp. CHINESE, per, K'o Hsueh Hua Pao, No 1, 1964, pp 3-5. AIR/FTD/HT-23-1298-68

Free Discussion on Chemical Fibers, by Ch'i-mig Pao. 9 pp. CHINESE, per, K'o Hsueh Hua Pao, No 1, 1964, pp 6-8. AIR/FTD/HT-23-1298-68

Discussion in Wirghting Information on Using Chemical Fibers, by Pai-Jung Fang, Ming-fang Yu et al. 11 pp. CHINESE, per, K'o Hsueh Hua Pao, No 1, 1964, pp 9-11. AIR/FTD/HT-23-1298-68

Synthesis and Biological Properties of Certain Organophosphorus Compounds, by Pastorek. 11 pp. CZECH, per, Chemické Zvesti. Vol 19, 1965, pp 413-419. ACSI-J-7680 FSTC-HT-23-449-70

A New Fluorimetric Method for Determination of Submicrogram Quantities of Cholinesterase Inhibitors, by M. Matousek. 8 pp. CZECH, per, Chemické Zvesti, Vol 22, No 3, 1968. ACSI-J-7690 FSTC-HT-23-438-70

Tungsten Hexafluoride, by Maurice Carles. 26 pp. FRENCH, rpt, CEA-BIB-125, Sept 1968. NASA TT F-12,662

The Sub-oxides of Cesium, M. Ye. Rengade. FRENCH, per, Comptes Rendus, Vol 148, May 1909, pp 1199-1202. *NASA TT F-12,808

Structure of the Transition $5d^7 7f$ in Europium Benzoylacetate in Solution, by 2 Yves Meyer, Henri Poncet, 8 pp. FRENCH, rpt, Comptes Rendus Hebdomadaires Des Seances de L'Academie Des Sci, Vol 259, No 1, 1964. AEC/UCRL-Tr-10401-69

Contribution to the Physical Study of Chemical Attack of Hematite Fe_2O_3 Crystals by Hydrochloric Acid, by R. Barð. FRENCH, per, Journal Microscopie, Vol 8, 1969, pp 431-483. *BISI 7888

Thermogravimetric and Infrared Absorption Spectrographic Study of Some Double Sulfates of the Magnesium Series, by C. Rocchiccioli, 6 pp. FRENCH, per, Mikrochim Acta, No 5, 1964, pp 764-769. AEC/ORNL-Tr-1548

Effluent Treatment at the Marcoule Plutonium Production Center, by F. Ruiz Sanchez, 11 pp. FRENCH, rpt, Proceedings of First French-Spanish Colloquium on Irradiated Fuel Reprocessing, Nov 11-14, 1967, pp 35-41. AEC/ANL-Tr-777-69

Activity Losses in Handling Aqueous Solutions of ^{131}I , by F. Moldenhawer, B. Uhlig, 12 pp. GERMAN, per, Isotopenpraxis, No 2, 1966, pp 333-338. AEC/ORNL-Tr-1660

Ferrocene- Acetylene, Second Communication:
Preparation and Reaction of Ferrocenyl-Alkynes and
Alkynyl-Ketones, by K. Schlogl, A. Mohar, 22 pp.
GERMAN, per, Monatshefte Chem, Vol 93, No 4,
1962, pp 861-876.
ARM/RSIC-Tr-954-69

On the Determination and Toxicity of Free and
Complex Cyanides in Water, by J. Blaha.
GERMAN, per, Vom Wasser, Vol 34, 1968, pp 175-195.
Dept of Navy NIC Tran 2938

Contribution to Thermoanalytical Study of the
Decomposition and Reduction of Sulfates (1),
by A. J. Hegedeus, K. Fukker, 11 pp.
GERMAN, per, Z. Anorg Allgem Chem, Vol 284, 1956,
pp 20-30.
AEC/ORNL-Tr-1616-69

Dissociation Pressure of Bismuth in the System:
Bismuth-Thorium, by Olaf Dahlke, Wigbert Gans,
8 pp.
GERMAN, per, Z. Metallk, Vol 60, No 5, 1969,
pp 465-468.
AEC/ORNL-Tr-2218-69

Comparison of Force Constants According to Two
External Rules, by A. Fadini.
GERMAN, per, Zeitschrift fur Physikalische Chemie
Neue Folge, No 64, 1969, pp 350-352.
*AFCRL

Gas Vapor Adsorption on Inhomogeneously Active
Solid Surfaces. VI, by J. Toth, 18 pp.
HUNGARIAN, per, Magy Kem Foly, Vol 67, 1961,
pp 397-402.
AEC/MLM-Tr-1643

The Adsorption of the Sulfonic Acids by Nylon 6,
by Yusuke Moriyoshi, Minoru Sekido. 15 pp.
JAPANESE, per, Journal of the Chemical Society
of Japan, Vol 70, No 12, 1967, pp 2334-2337.
NAV/NAEC-Access No 26019

Chromatography of Peptides, by Yoshito Yasui.
22 pp.
JAPANESE, per, Kagaku no Ryoiki Zokan, Vol 63,
1964, pp 135-154.
NASA TT F-12,660

The Reactivity of Sodium Chlorate, by E. Osada.
20 pp.
JAPANESE, per, Kogyo Kagaku Kyokaiishi, Vol 27,
No 2, 1966, pp 91-100.
NASA TT F-12,679

Reaction of Carbon Dioxide and Hydrogen Under High
Pressure Synthesis of Methyl Alcohol, 9 pp.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 62, 1959,
pp 939-941.
AEC/LA-Tr-69-11

Fuel Cells Using Organic Redox Compounds, by
Jun Mizuguchi, Shuichi Suzuki.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 65, No 10,
1962, pp 1606-1608,
Tr No 56, Oct 1969
AIR/AFCRL/69-0425

The Use of an Electron Carrier System of $\text{Ni}_4\text{Cl}_2\text{-CuSO}_4$ as a Biochemical Reaction Cell, by
Jun Mizuguchi, Shuichi Suzuki.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 67, No 11,
1964, pp 1887-1889.
Tr No 59, Oct 1969
AIR/AFCRL/69-0430

Rate of Hydrogen Absorption by Copper, by
S. Imoto, G. Mima, 17 pp.
JAPANESE, per, Nippon Kinzoku Gakkaishi,
Vol, 20, 1956, pp 221-224.
AEC/UCRL-Tr-10380-69

The Heat of Solution of Hydrogen in Metals, by
Saburo Yanagisawa, Akira Tsujioka, 12 pp.
JAPANESE, per, Nippon Kinzoku Gakkai-shi,
Vol 23, No 2, 1959, pp 128-132.
AEC/UCRL-Tr-10384-69

Study on Removal of Iodine from Atmosphere by
Spray III. Removal of Organic Iodides by Spray,
by Yukinori Nishizawa, 8 pp.
JAPANESE, per, Nippon Genshiryoku Gakkaishi,
Vol 11, No 5, 1969, pp 262-267.
AEC/ORNL-Tr-2240

Chemical Properties of Hydrocyanic Acid. I. and
II. by Kiyoshi Onoda.
JAPANESE, per, Nippon Nogei Kagaku Kaishi,
Vol 35, 1961, pp 1323-1331.
*NASA TT F-12,821

Chemical Properties of Hydrocyanic Acid. III.
by Kiyoshi Onoda.
JAPANESE, per, Nippon Nogei Kagaku Kaishi,
Vol 36, No 2, 1962, pp 167-173.
*NASA TT F-12,822

Chemical Properties of Hydrocyanic Acid. IV.
by Kiyoshi Onoda.
JAPANESE, per, Nippon Nogei Kagaku Kaishi,
Vol 36, No 3, 1962, pp 255-259.
*NASA TT F-12,824

Chemical Properties of Hydrocyanic Acid. V.
by Kiyoshi Onoda.
JAPANESE, per, Nippon Nogei Kagaku Kaishi,
Vol 36, No 7, 1962, pp 575-580.
*NASA TT F-12,825

Chemical Properties of Hydrocyanic Acid. VI.
by Kiyoshi Onoda.
JAPANESE, per, Nippon Nogei Kagaku Kaishi,
Vol 36, No 4, 1962, pp 370-374.
*NASA TT F-12,823

Aluminum Hydroxides and Oxides-Their Preparation
and Properties, by R. Fiedorow.
POLISH, per, Wiad. Chem. Vol 21, 1967, pp 761-770.
*AEC/ORNL-Tr-2256

Research into the Detonation of Ammonite PZhV-20
and Certain other Explosives, by A. N. Dremine,
K. K. Shvedov, 32 pp.
RUSSIAN, per, Vzryvnoye Delo, Vol 52, No 9, 1963,
pp 10-25.
AEC/UCRL-Tr-10405-69

Initiation of Detonation by Shock Waves in Cast
and Pelletized TNT, by A. N. Dremine and
S. A. Koldunov, 28 pp.
RUSSIAN, per, Vzryvnoye Delo, Vol 63, No 20, 1967,
pp 37-50.
AEC/UCRL-Tr-10408-69

Development of Chemical Industry, by
Alexandre Boaba, 10 pp.
RUMANIAN, per, Revista de Chimie, Bucharest,
Aug 1969, pp 457-464.
JPRS 49450

Trends in Chemical Research Reviewed, by
C. D. Nenitescu, 6 pp.
RUMANIAN, per, Revista de Chimie, Bucharest,
Aug 1969, pp 465-468.
JPRS 49450

Development of Chemical Fertilizer Industry,
by A. Diaconescu, 10 pp.
RUMANIAN, per, Revista de Chimie, Bucharest,
Aug 1969, pp 473-478.
JPRS 49450

Development of Organic Chemical Industry
Traced, by Gh. Caranfil, 9 pp.
RUMANIAN, per, Revista de Chimie, Bucharest,
Aug 1969, pp 479-483.
JPRS 49450

Development of Drug Industry Traced, by
F. Bucur, C. Sirbu, 12 pp.
RUMANIAN, per, Revista de Chimie, Bucharest,
Aug 1969, pp 490-495.
JPRS 49450

Present Program and Future Development of the
Plutonium Chemistry Group of the Chemistry and
Isotope Division, by F. Ruiz Sanchez, 5 pp.
SPANISH, rpt, Proceedings of the first French-
Spanish Colloquium on Irradiated Fuel Processing,
Nov 11-14, 1967, pp 143-146.
AEC/ANL-Tr-775-69

Separation of Uranium, Plutonium and Fission
Products by Synthetic Inorganic Ion Exchanges,
by M. Rodriguez Parra, A. Uriarte Hueda, 15 pp.
SPANISH, rpt, Proceedings of First French-Spanish
Colloquium on Irradiated Fuel Reprocessing, Nov
11-14, 1967, pp 201-220
AEC/ANL-Tr-776-69

Dimethyl Sulfoxide as Solvent for Sulfur Dioxide,
by Tor Smedslund, 5 pp.
SWEDISH, per, Finska Kemistamfundets-Meddelanden,
Vol 58, No 1, 1950, pp 40-43.
AEC/ORNL-Tr-2225-69

Earth Sciences & Oceanography

Tectonics of Eurasia
RUSSIAN, bk, Akad Nauk SSSR, 1966
*CFSTI TT 70-50018

Characteristics of the Geophysical Fields in the
Territory of the USSR, by N. M. Solov'yeva.
RUSSIAN, bk, Geologicheskoye Stroyeniye SSSR,
Vol II, Tektonika, 1968, pp 15-52.
*ACIC-TC-1605

Oil shales from Baltic deposits; chemistry
and technology. Bibliography 1791-1967,
Part I and II, by E. Pata, 615 pp.
RUSSIAN, bk, Goriuchie slantsy pribaltusk-
ogo mestorozhdeniya khimiya i tekhnologiya,
1968
*CFSTI TT 70-50062

Deep Seismic Sounding of the Earth's Crust and
Upper Mantle, by I. P. Kominskaya. 227 pp.
RUSSIAN, bk, Metod Glubinnogo Seismicheskogo
Zondirovaniya Zemnoi Kory i Verkhov Mantli, 1968
CONSULTANTS BUREAU/PLENUM PRESS

Geography of Antarctica, by K. K. Markov,
V. I. Bardin, et al.
RUSSIAN, bk, Mysl', 1968
*CFSTI TT 70-50015

Tectonics and the Formation of Magmas, by
Yu. M. Sheinmann. 231 pp.
RUSSIAN, bk, Ocherki Glubinnoi Geologii: O Svyazi
Tektoniki s Vozniknoveniem Magm, 1968.
CONSULTANTS BUREAU/PLENUM PRESS

The Vertical Circulation and the Status of
Frontal Zones in the Central Part of North
Atlantic, by V. M. Gruzinov. 5 pp.
RUSSIAN, per, Okeanologiya, Vol 4, No 3,
1964, pp 408-411.
Dept of Inter
BCF/OFF
A-33/Nov 69/62
On Loan Only

Generalized Method of Stress Calculation in Rock
Blasting, by G. I. Pokrovskiy, 15 pp.
RUSSIAN, bk, Problema Razrusheniya Gornyykh Porod
Vzryvom, 1967, pp 5-14.
AEC/UCRL-Tr-10386-69

Anticyclonic Circulation of Ice in the Arctic
Basin and The Drift of North Pole-8 Station,
by Z. M. Gudkovich.
RUSSIAN, per, Problemy Arktiki i Antarktiki,
Vol 23, 1966, pp 5-10.
*Dept of Navy NOO Trans 483

Problems of the Arctic and Antarctic,
RUSSIAN, bk, Problemy Arktiki Antarktiki,
Issues No. 29-32, 1969
*CFSTI TT 70-50017

Problems of Global Hydrology, by
G. P. Kalinin, 376 pp.
RUSSIAN, mono, Problemy global'noi gidrol-
ogiy, 1968
*CFSTI TT 70-50054

Problems of the North,
RUSSIAN, bk, Problemy Severa, Issues 10-13
date unknown
*CFSTI TT 70-50016

Streamflow, by D.L. Sokolovskiy, 538 pp.
RUSSIAN, mono, Rechnoi Stok, 1968
*CFSTI TT 70-50058

Oceanic Research of the Fishing Regions in the
Atlantic Ocean, by D. Ya. Berenbeim,
V. N. Yakovlev. 5 pp.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 7,
1969, pp 7-10.
Dept of Inter
BCF/OFF
A-33/Nov 69/15
On Loan Only

The Pacific Ocean. Hydrology of the Pacific
Ocean, by A. D. Dobrovolsky.
RUSSIAN, bk, Tikhii Okean. Gidrologiya Tikhogo
Okeana, 1968, pp 1-552.
*Dept of Navy NOO Contract Trans 35

Oceanographic Conditions and Fishery in the
Gulf of Mexico in Autumn and Winter, by
Yu. A. Torin. 7 pp.
RUSSIAN, per, Trudy AtlantNIRO, No 11, 1964,
pp 4-11.
Dept of Inter
BCF/OFF
A-33/Nov 69/49
On Loan Only

Evaluation of Random Selection of Data on Currents
in Estuary and Coastal Sectors of the Sea, by
N. A. Skriptunov.
RUSSIAN, per, Trudy Gosud Okean Inst, Vol 89,
1967, pp 72-80.
*Dept of Navy NOO Trans 484

Determining the Time Interval Between the
Measurements of Currents Velocities, by
O. A. Ovsyannikova.
RUSSIAN, per, Trudy Gosud Okean Inst, Vol 95,
1968, pp 65-71.
*Dept of Navy NOO Trans 485

Some Statistical Characteristics of Coastal
Currents Based on Aerial Photographs, by
I. Z. Konovalova.
RUSSIAN, per, Trudy Gosud Okean Inst, Vol 95,
1968, pp 72-84.
*Dept of Navy NOO Trans 486

Some Results of the Investigation of Black
Sea Interstitial Water, by O. V. Shishkina.
12 pp.
RUSSIAN, per, Trudy Inst Okeanologiy, Vol 54,
1962, pp 47-57.
NAV/NOO/Tran-354-69

On the Derivation of the Boundary Condition in the Earth Figure Theory, by V. F. Yeremeyev. RUSSIAN, per, Trudy TSNIIGAIK, No 176, 1969, pp 9-14.

ACIC-TC-1580

On the Principle of Simultaneous Adjustment of Plane Coordinates and Quasigeoid Heights in an Astrogeodetic Net, by V. F. Yeremeyev. RUSSIAN, per, Trudy TSNIIGAIK, No 176, 1969, pp 59-67.

ACIC-TC-1584

Soils of the Siberian Forest Oblasts of the USSR. Soils of the Brown Forest Oblasts of the USSR. Soils of the Steppe Oblasts of the USSR. Soils of the Semidesert and Desert Oblasts of the USSR. Soils of the Humid, Sub-humid and Subtropical Oblasts of the USSR. RUSSIAN, bklets, Ukazaniya po Klassifikatsiy i Diagnostik e Pochv, 1967, 405 pp.

*CFSTI TT 70-50044/1

On the Direct Determination of the Elements of the Rotation Matrix, by J. Somogyi. CZECH, per, Geodezia es Kartografia, Vol 21, No 4, 1969, pp 264-267.

*ACIC-TC-1599

On the Problem of Computing the First Gravitometric Correction Term in Molodenskiy's Method, by K. Kuchera.

CZECH, per, Prace Geofysikalniho Ustavu Ceskoslovenske Akademie Ved, Geofysikalni Sbornik, No 264, 1967, pp 51-64.

*ACIC-TC-1600

Some Remarks on the Accuracy of Numerical Interpolation of Geophysical Quantities, by V. Vyskocil.

CZECH, per, Prace Geofysikalniho Ustavu Ceskoslovenske Akademie Ved, Geofysikalni Sbornik, No 266, 1967, pp 77-90.

*ACIC-TC-1602

The Gravity Field of a Homogeneous Polygon, by T. Kolbenhayer.

CZECH, per, Prace Geofysikalniho Ustavu Ceskoslovenske Akademie Ved, Geofysikalni Sbornik, No 267, 1967, pp 91-105.

*ACIC-TC-1601

On the Effects of Damping in the Observations of Gravity Variations with the Askania Gravitometer, by P. S. Korba.

FRENCH, per, Marees Terrestres, Bulletin D'Informations, No 52, Dec 1968, pp 2440-2443.

ACIC-TC-1564

Examples of Utilization of Geophysical and Geochemical Methods for the Purpose of Locating Buried Stratiform Deposits, by J. C. Samama. FRENCH, per, Sciences de la Terre, Part I, Gravimetry, No 9, Apr 1967, pp 23-39.

*ACIC-TC-1607

Ground Frost: A Listing and Evaluation of More Recent Literature Dealing with the Effect of Frost on the Soil, by H. L. Jessberger. 497 pp. GERMAN, bk, Feb 1961, Part I - 433 pp. Part II - 135 pp.

ACSI-J-7390

FSFC-HT-23-311-70

Gravimetric Deflections of the Vertical at the Stations Sindlingen, Mainflingen and Homberg, by F. Hilger.

GERMAN, per, Deutsche Geodatische Kommission, Series B, Applied Geodesy, No 161, 1968, 37 pp.

ACIC-TC-1575

Investigation of Instrumental Errors of Universal and Transit Instruments with the Aif of Autocollimation, by R. Schwebel.

GERMAN, rpt, Deutsche Geod Kommission Bei der Bayerischen Akad der Wissenschaften, Series C, No 117, 1968, 144 pp.

*ACIC-TC-1609

Shot-Hole Drilling in Friable Rock, by H. Riedler, 11 pp.

GERMAN, per, Erzbergbau Metall, Vol 19, No 1, 1966, pp 9-12.

AEC/ORNL-Tr-3031-69

Research on Combating Erosion Reviewed, by Cao Xuan Tho, 6 pp.

VIETNAMESE, per, Tin Tuc Hoat Dong Khoa Hoc, Hanoi, No 7, 1969, pp 46-49.

JPRS 49428

Geological Branch Reviews Its Recent Work, by Le Trong Hong, 5 pp.

VIETNAMESE, per, To Quoc, Hanoi, No 7, July 1969, pp 17-19.

JPRS 49552

Algorithmic Selection of the Optimum Structure of a Digital Control Computer, by Ye. Ye. Zul'fugarzade, O. I. Semankov. 18 pp. RUSSIAN, rpt, AN BSSR, Institut Tekhnicheskoy Kibernetiki. Vychislitel'naya Tekhnika Mashinostroyeni, Nauchno-Tekhnicheskii Sbornik, Minsk, 1967, pp 183-199. AIR/FTD/HT-23-196-69

The Modeling of Random Neural Networks on an Electronic Digital Computer, by V. I. Lesis. 9 pp. RUSSIAN, rpt, AN SSSR. Nauchnyy Sovet Kompleksnoy Probleme "Kibernetika" Voprosy Bioniki, 1967, pp 204-210. AIR/FTD/HT-23-1336-68

Automation in Control of Electric Systems and Sub-systems, by L. V. Pavlova 323 pp. RUSSIAN, mono, Automatizatsiya upravleniya elektricheskimi sistemami i ob'ektami, 1968 *CPSTI TT 70-50026

Electrical Conductivity of Chromium Sulphides, by I. G. Gakidov, N. P. Grazhdankina. RUSSIAN, per, Dok Ak Nauk SSSR, Vol 63, No 1, 1948, pp 27-28. Dept of Navy APL/JNU T-2364

Collection Process, by Yu. M. Gorchakov, 5 pp. RUSSIAN, per, Doklady Akademii Nauk SSSR, Moscow, Vol 188, No 3, 1969, pp 514-516. JPRS 49457

Finite Control of Distributed Linear Systems, by A. G. Butkovskiy, 7 pp. RUSSIAN, per, Doklady Akademii Nauk SSSR, Moscow, Vol 188, No 3, 1969, pp 538-541. JPRS 49457

Finite Control of Discrete Linear Systems, by A. G. Butkovskiy, 7 pp. RUSSIAN, per, Doklady Akademii Nauk SSSR, Moscow, Vol 188, No 4, 1969, pp 762-765. JPRS 49455

Certain Problems in Control Theory of Logic Nets, by V. G. Igolinskiy. 23 pp. RUSSIAN, rpt, Doklady Seminar "Teoriya Avtomatov" 1967, pp 3-32. AIR/FTD/HT-23-167-69

Electromigration Method in Physicochemical and Radiochemical Investigations, by I. A. Ivanov, et al. approx 256 pp. RUSSIAN, bk, Elektroniatsionnyi Metod v Fiziko-Khimicheskikh i Radiochimicheskikh Issledovaniyakh, 1970. CONSULTANTS BUREAU/PLENUM PRESS

Distribution of Electrons in the Field of a Charged Sphere Emitting Electrons, by Ye. V. Samuylov. RUSSIAN, bk, Fizicheskaya Gazodinamika Ioniz i Khim Reagiruyushchikh Gazov, 1968, pp 3-7. *NASA TT F-12,791

Standard for Receiving Band Short Wave Antennas Used for Fixed Radio Stations and Radio Receiving Centers, 15 pp. RUSSIAN, rpt, GOST 6497-67. ARM/FSTC/HT-23-777-68

Outdoor Wire Feeders for Antennae, 12 pp. RUSSIAN, rpt, GOST 6917-67. ARM/FSTC/HT-23-301-69

Low-Power Electronic Tubes Type 30TS6S for a Broad Range of Applications, 8 pp. RUSSIAN, rpt, GOST 8078. ARM/FSTC/HT-23-303-69

Type 5Ts4C Low-Powered Electron Tube for Widely Used Devices, 9 pp. RUSSIAN, rpt, GOST 8079. ARM/FSTC/HT-23-304-69

Low-Power Type 6X6C Electron Tubes for Widely Employed Devices, 7 pp. RUSSIAN, rpt, GOST 8080-67. ARM/FSTC/HT-23-774-68

Dynamic Diffuser Loudspeakers, 16 pp. RUSSIAN, rpt, GOST 9010-67. ARM/FSTC/HT-23-305-69

Electronic Computers. Punch Tape Input Devices, 11 pp. RUSSIAN, rpt, GOST 13051-67. ARM/FSTC/HT-23-306-69

Computation Systems. Reports of the First All-Union Conference on Computation Systems held in Novosibirsk June 5-10, 1967, Volume 1. Computer Systems, by V. G. Khoroshevskiy 248 pp.

RUSSIAN, bk, Izdatel'stvo Nauka Sibirskoe Otdelenie, Novosibirsk, 1968

*AFC-tr-7125

*Vol. 1 UC-32

*CFSTI TT 70-50013/1

Sporadic E Layer and Nightglow Emission at the Lambda 5577-Angstrom Units Wavelength, by M. P. Korobeynikova.

RUSSIAN, per, Izvestiya Akademiy Nauk SSSR, Seriya Fiziko-Tekhnicheskikh i Geologicheskikh, No 2, 1969, pp 46-51.

*AFCRL

Application of Digital Modeling for Analyzing Interference Immunity of Digital Computers, by B. I. Surkov.

RUSSIAN, per, Izv VUZ Priborostroyeniye, Vol 11, No 7, 1968, pp 70-76.

*ACSI-J-7826

*FSTC-HT-23-459-70

Aperture Characteristics of Photoelectric Detectors, by A. S. Grinin.

RUSSIAN, per, Izv VUZ Priborostroyeniye, Vol 11, No 1, 1969, pp 105-108.

*ACSI-J-7828

*FSTC-HT-23-461-70

Coefficient of Directive Gain of Convex Pencil-Beam Antenna Arrays, by D. I. Voskresenskiy, V. S. Filippov, 17 pp.

RUSSIAN, per, IVUZ, Radioelektronika, Vol 11, No 5, 1968, pp 411-425.

ARM/FSTC/HT-23-673-69

Control Systems at Industrial Plants, by 7 pp. RUSSIAN, per, Mekhanizatsiya i Avtomatizatsiya Upravleniya, No 1, 1967, pp 11-13.

AIR/FTD/MT-24-511-68

Microprogram Automation Constructed of Voltage-Output Elements Using Tunnel Diodes, by V. I. Kartashev, G. M. Lutskiy. 9 pp.

RUSSIAN, per, Mekhanizatsiya i Avtomatizatsiya Upravleniya, No 1, 1967, pp 30-33

AIR/FTD/MT-24-05-69

Device for Input Graphic Information to a Computer, by V. S. Vaynshteyn, A. A. Grigor'yan. 6 pp.

RUSSIAN, rpt, Moscow, Vsesoyuznyy Institut Nauchnoy i Tekhnicheskoy Informatsii, Avtomaticheskoye Chitanie Teksta, 1967, pp 176-179.

AIR/FTD/MT-24-446-68

Randomization of Symbol Repetition of Punch Cards With Superimposed Coding in Information-Search Systems, by L. Ya. Pirovich. 10 pp.

RUSSIAN, per, Nauchno-Tekhnicheskaya Informatsiya, Seriya 2, Informatsionnyye Portsessy i Sistemy, No 7, 1967, pp 21-23.

AIR/FTD/HT-23-881-68

Academician Glushkov Traces Role of Computers, by V. M. Glushkov, 7 pp.

RUSSIAN, per, Ogonek, Moscow, No 39, Sept 1969, pp 12-13.

JPRS 49507

Power Transmission by Direct and Alternating Currents; Notes for the Scientific-Research Institute for Direct Current, 320 pp.

RUSSIAN, mono, Peredacha energiy postoyannym i peremennym tokom. Izvestiya Nauchno-Issledovatel'skogo Instituta postoyannogo toka, 1968

*CFSTI TT 70-50027

Calculation of Distribution of Feed Current Over the Surface of a Slot Antenna, by V. S. Degtyarev, 6 pp.

RUSSIAN, per, Radiotekhnika, No 3, 1966, pp 84-88.

ARM/FSTC/HT-23-311-69

Current-collector Contact Testing, by N. I. Kormilov. 8 pp.

RUSSIAN, bk, Samoletostroyeniye i Tekhnika Vozdushnogo Flota, 1966, pp 100-105.

NASA TT F-12,588

Construction of Circuits of Automatic Signal Indicators of Flow Conditions Based on a Measurement of Pressure Distribution Along the Streamline Surface, by A. M. Mkhitarian, V. Ya. Fridland, et al. 8 pp.

RUSSIAN, per, Samoletostroyeniye i Tekhnika Vozdushnogo Flota, No 10, 1967, pp 47-52.

AIR/FTD/MT-24-397-68

One Method of Representing Algorithms of Machine Translation, by G. B. Chikoidze. 8 pp.

RUSSIAN, per, Sobehcheniya AN GRUZSSR, Vol 48, No 2, 1967, pp 293-298.

AIR/FTD/MT-24-411-68

Method of Computer Search, by L. Araytis.

RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, No 1, 1967, pp 93-100.
AIR/FTD/MT-24-130-69

Asynchronous Biquistor Structures, by V. V. Ignatushchenko. 8pp.

RUSSIAN, rpt, Trudy, Simpozium po Vychislitel'nyim Sistemam, Novosibirsk, 1966, 1967, pp 197-203.
AIR/FTD/MT-24-410-68

An Experiment in Writing a Program for Processing and Results of Temperature and Wind Soundings in a Digital Computer, by D. V. Prashko, G. P. Trifonov. 7 pp.

RUSSIAN, per, Trudy Tsentral'naya Aerologicheskaya Observatoriya, Vol 74, 1966, pp 71-74.
AIR/FTD/MT-24-436-68

The Role and Place of the Machine in Scientific and Technical Information, by A. I. Mikhaylov. 11 pp.

RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, No 1, 1967, pp 3-4.
AIR/FTD/MT-24-130-69

Basic Trends in the Development of Information Retrieval Systems, by D. I. Voskoboinik, G. Ye. Vledits, et al. 14 pp.

RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, No 1, 1967, pp 9-15.
AIR/FTD/MT-24-130-69

Preparation of Engineering and Scientific Cadres With Respect to Mechanization and Automation of Information Works, by I. I. Petrov, I. B. Pochkay. 7 pp.

RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, No 1, 1967, pp 16-24.
AIR/FTD/MT-24-130-69

The Logic of Descriptor Retrieval Systems, by V. S. Chernyavskiy. 13 pp.

RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, No 1, 1967, pp 25-29.
AIR/FTD/MT-24-130-69

With the use of the subject associative-retrieval method of organization of information, by S. A. Gorodkov. 10 pp.

RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, No 1, 1967, pp 93-100.
AIR/FTD/MT-24-130-69

Experience in Creating Information-Retrieval Language Via Computer Technology, by V. K. Vakhobov, A. A. Mikhaylova, et al. 9 pp.

RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, No 1, 1967, pp 134-142.
AIR/FTD/MT-24-130-69

Realization of Thematic Information-Retrieval Systems on an Electronic Digital Computer, by M. P. Yubiyko. 7 pp.

RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, No 1, 1967, pp 156-161.
AIR/FTD/MT-24-130-69

Certain Questions of Machine Preparation of Indexes for Current and Retrospective Retrieval of Scientific and Technical Information Materials, by D. I. Mekhtiyev, Ye. K. Kuznetsova. 12 pp.

RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, No 1, 1967, pp 169-171.
AIR/FTD/MT-24-130-69

Mechanized Ips for a Varied Fund Developed and Introduced by the Upper-Volga TsBTI, by V. M. Meanik. 15 pp.

RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, No 1, 1967, pp 181-188.
AIR/FTD/MT-24-130-69

Questions of Development of an Information-Retrieval System for Automated Control of the Work of a Naval Fleet of Steam Navigation, by A. N. Kiselev, I. A. Mikhaylova. 14 pp.

RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, No 1, 1967, pp 201-208.
AIR/FTD/MT-24-130-69

Experimental Investigations of Comparative Effectiveness of Manual and Mechanized Ips in the N. K. Krupskaya Leningrad State Institute of Culture, by A. V. Sokolov, D. I. Byumenau, et al. 15 pp.

RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, No 1, 1967, pp 301-308.
AIR/FTD/MT-24-130-69

Information Retrieval Systems, by R. I. Trukhayev, V. V. Khomenyuk. 10 pp.

RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, No 1, 1967, pp 328-337.
AIR/FTD/MT-24-130-69

A System of Automatic Differentiation of Distribution of Information (SARI-1) on Constant Inquiries Developed in TsBNTI AKIAE¹, by A. I. Nadtochiy, V. F. Kalinin, et al. 36 pp.
RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, No 1, 1967, pp 363-368
AIR/FTD/MT-24-130-69

Application of Domestic Punch-Card Machines and the "Minsk-22" for Composition of a Description Index, by A. I. Nadtochiy, L. N. Krasovskaya, et al. 9 pp.

RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, No 1, 1967, pp 454-476
AIR/FTD/MT-24-130-69

Preface: Transactions of the III All-Union Conference on Information Retrieval Systems and Automated Processing of Scientific and Technical Information. 4 pp.

RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, Vol 3, 1967, pp 3-4.
AIR/FTD/MT-24-132-69

Questions of the Automation of Input, Output, and Data Processing on Computers in Systems of Information Service, by O. V. Mamontov, M. L. Avrukh, et al. 23 pp.

RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, Vol 4, 1967, pp 25-38.
AIR/FTD/MT-24-133-69

Organization of an Information System Based on the Computer "DNEPR", by A. I. Nikitin, G. Ya. Mashbits. 6 pp.

RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, Vol 4, 1967, pp 203-206.
AIR/FTD/MT-24-133-69

Development of a Dictionary and Algorithm for the System of Automatic Descriptor Indexing of Patent Documentation in the English Language, by A. G. Gerasimov, Yu. V. Girshchberg, et al. 14 pp.

RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, Vol 4, 1967, pp 222-229.
AIR/FTD/MT-24-133-69

Questions of the Dynamic Optimization of Information Process in Computers With Highly Developed Parallelism, by I. A. Petukhov. 10 pp.

RUSSIAN, per, Trudy Vsesoyuznoy Konferentsii po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, Vol 4, 1967, pp 300-305.
AIR/FTD/MT-24-133-69

High-Speed Input Unit of an Automatic Reader, by V. V. Besov. 7 pp.

RUSSIAN, rpt, Trudy Vsesoyuznaya Konferentsiya po Informatsionno-Polskovym Sistemam i Avtomatizirovannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, 1966, Moscow. Avtomaticheskiye Chitayushchiye Ustroystva, 1967, pp 165-168.
AIR/FTD/MT-24-35-69

Computer Elements and Systems, 341 pp.

RUSSIAN, bk, Vychislitel'nye Sistemy, (No. 26,27,28, akademiya Nauk SSSR. Sibirskoe Otdelenie, Institut Matematiki)

*AEC-tr-7103

*UC-32

*CFSTI TT 70-50010

Computer elements systems, collection of works, 386 pp.

RUSSIAN, bk, Vychislitel'nye sistemy-Sbornik Trudov, (No. 29,30,31, Akademiya Nauk SSSR. Sibirskoe Otdelenie, Institut Matematiki)

*AEC-tr-7104

*UC-32

*CFSTI TT 70-50011

Computer Systems, Report of the Conference on the Computer Systems, Novosibirsk, May 1966, 286 pp.

RUSSIAN, bk, Vychislitel'nye Sistemy. Trudy Simpoziuma, g. Novosibirsk, Mai 1966 g., 1967

*AEC-tr-7124

*UC-32

*CFSTI TT 70-50012

Computation Systems. Reports of the First All-Union Conference on Computation Systems held in Novosibirsk June 5-10, 1967. Vol.2 Computation Configuration, by O.L. Bandman, 192 pp.

RUSSIAN, bk, Vychislitel'nye Sistemy. Trudy I. Vsesoyuznoi Konferentsiy po Vychislitel'nyy Sistemam Prokhdovishei V R. Novosibirske 5-10 Iyunya 1967 g. Vypusk 2. Vychislitel'n Sredy, 1968

*AEC-tr-7125

*Vol.2-UC-32

*CFSTI TT 70-50013/2

Computation Systems. Reports of the First All-Union Conference on Computation Systems held in Novosibirsk June 5-10, 1967. Vol.3 Computer Programming, O.L. Bandman, V.A. Skorobogatov, 143 pp.

RUSSIAN, bk, Vychislitel'nye Sistemy. Trudy I. Vsesoyuznoi Konferentsiy po Vychislitel'nyy Sistemam Prokhdovishei V R. Novosibirske 5-10 Iyunya 1967 g. Vypusk 3 Programmirovaniye na Vychislitel'nykh Sredakh, 1968

*AEC-tr-7125

*Vol.3-UC-32

*CFSTI TT 70-50013/3

Computation Systems. Reports of the First All-Union Conference on Computation Systems held in Novosibirsk June 5-10, 1967. Vol.4 Methods for Calculation and Programming in Computer Systems, by Yu. G. Kosarev, 83 pp.

RUSSIAN, bk, Vychislitel'nye Sistemy. Trudy I. Vsesoyuznoi Konferentsiy po Vychislitel'nyy Sistemam Prokhdovishei V R. Novosibirske 5-10 Iyunya 1967 g. Vypusk 4. Methody Vychisleniy i Programirovaniya na Vychislitel'nykh Sistemakh, 1968

*AEC-tr-7125

*Vol. 4 UC-32

*CFSTI TT 70-50013/4

Memory Devices, by L. P. Krayzmer. RUSSIAN, bk, Zapominayushchiye Ustroystva, 1968, pp 1-167.

*ACSI-J-7837

ID 1571017469

A Device With Learning Capability, by N. M. Sotina, Yu. P. Burlay. 5 pp. RUSSIAN, Patent No. 200,888, 19 AUG 1966, 1967

PP 1-3.
AIR/FTD/HT-23-1245-68

Power Transmission Without Conductors, by Ying Chiao. 4 pp. CHINESE, per, K'o Hsueh Hua Pao, No 6, 1966, p 243.

AIR/FTD/HT-23-839-68

Electrical Analog Calculator for Shear Distribution in a Single-Tier Factory Building Framework, by Chiu-Ying Shih, Ken-Fu Ch'in. 29 pp. CHINESE, per, T'u-mu Kung-ch'eng Hsueh-pao, Peking, Vol 7, No 4, 1960, pp 2-11.

AIR/FTD/HT-23-1289-68

Research on the Diffraction of Electrons Electronic Analysis, by M. Ponte.

FRENCH, per, Annales de Physique, Ser 10, Vol 13, 1930, pp 396-452.

*NASA TT F-12,810

Using a Computer to Obtain a Unit Overhaul Programme, by F. Legros.

FRENCH, per, Bull d'Inf des Centrales Electriques, No 62, Oct 1968, pp 7-15.

CEGB/C.E. Trans 5204

Processing by Computer of Data Supplied by a Quadrupole Mass Spectrometer, by P. Ronteix, 10 pp.

FRENCH, per, Chimie Analytique, Vol 51, No 6, 1969, pp. 290-295.

AEC/UCRL-Tr-10381-69

Direct and Synthetic Testing of Circuit-breakers. First Part: Stresses in a Circuit-breaker Direct Testing, by P. Heroin.

FRENCH, per, E.D.F. Bull de la Direction des Etudes et Recherches, Ser B, No 2, 1968, pp 23-52.

CEGB/C.E. Trans 5095

The Processing of Measurements in Computer, by A. Chapelot.

FRENCH, per, Energie Nucleaire, Vol 10, Dec 1968, pp 490-501.

CEGB/C.E. Trans 5239

Development of an All-electric Star Sensor with Image Dissector Tube, by W. Bross. 18 pp.

GERMAN, rpt, BMwF-FB-W-68-76.

NASA TT F-12,646

The Dynamic Performance of Electric Traction units, by H. Buhler.
GERMAN, per, Glaser's Annalen, Vol 91, No 10, 1967, pp 314-321.
*Dept of Navy APL/JHU J-1430

Calculating Meander-Shaped Inductances in Printed Circuits, by E. Sallhom. 7 pp.
GERMAN, per, Radio und Fernsehen, No 23, 1967, pp 725-726.
AIR/FTD/HT-23-64-69

Practical Experience with Siemens SF₆ Circuit-breakers from 245 and 420 kV, by O. Kopriva, H. Troque.
GERMAN, per, Siemens-Zeit, Vol 42, Aug 1968, pp 601-604.
CEGB/C.E. Trans 5153

EMG 830-10 Modular-System Computer, by B. Juhasz, B. Yukhas. 8 pp.
HUNGARIAN, per, Maresh Automatika, No 2, 1968, pp 68-70.
AIR/FTD/HT-23-183-69

ZAM 41 Computer for Data Processing Described, by Bogdan Bialek, 13 pp.
POLISH, per, Mazvy Matematyczne, Warsaw, Sept 1969, pp 1-5.
JPRS 49380

Arc Discharge Tubes with Metal Vapors Serving as Intensive Sources on Infrared Radiation, by T. Burakowski. 16 pp.
POLISH, per, Przeglad Elektroniki, No 10, 1968, pp 490-505.
ACSI-J-7574
FSTC-HT-23-252-70

Need for Computer Technology Program Cited, by Stefan Bratkowski, Karol Szwarc, 12 pp.
POLISH, np, Zycie Gospodarcze, Warsaw, 16 Nov 1969, pp 1, 4.
JPRS 49425

Computer Applications in Industry Described, by D. Dorian, R. Vlaicu, 10 pp.
ROMANIAN, per, Stiinta si Tehnica, Bucharest, Oct 1969, pp 3-6.
JPRS 49501

Predictor-Corrector Method with Free Step Size for Solving Systems of Ordinary Real Differential Equations, by Abbas I. I. Abdel Karim, 26 pp.
UAR, per, Computing Review, Vol 5, No 1, 1964, pp 272-281.
AEC/SCL-Tr-255-69

Long-Range Load of European Power Grid Analyzed, by A. M. Nekrasov, 21 pp.
RUSSIAN, per, Elektricheskiye Stantsii, Moscow, Nov 1969, pp 6-13.
JPRS 49497

Contact Heaters for Turbo-Installations of Single-Circuit Aess, by G. I. Yefimochkin, 10 pp.
RUSSIAN, per, Elektricheskiye Stantsii, Moscow, No 11, 1969, pp 21-26.
JPRS 49497

Cooling Towers for Large Power Units, by L. D. Berman, 13 pp.
RUSSIAN, per, Elektricheskiye Stantsii, Moscow, No 11, 1969, pp 27-32.
JPRS 49497

Features of Steam Flow in a Turbine Stage Under No-load Conditions, by I. I. Kirillov.
RUSSIAN, per, Energomashinostroyeniye, Vol 14, Aug 1968, pp 37-38.
CEGB/C.E. Trans 5242

Meeting Urges Pumped Storage Power Plants, by A. N. Goncharov, 8 pp.
RUSSIAN, per, Gidrotekhnicheskoye Stroitel'stvo, Moscow, No 10, 1969, pp 49-52.
JPRS 49438

On the Problem of Correcting Twisted Turbine Blades, by I. G. Gogolev, R. I. D'yakov, et al. 9 pp.
RUSSIAN, per, Izvestiya VUZ. Energetika, No 9, 1967, pp 62-67.
AIR/FTD/HT-23-867-68

On Selection of the Optimal Rate of Reactivity of a Single-Stage Turbine, by D. A. Dekhovich. 9 pp.
RUSSIAN, per, Izvestiya VUZ. Energetika, No 2, 1968, pp 52-56.
AIR/FTD/HT-23-875-68

Soviet Power Transformers, by Vil'yam Borisovich Atabekov, 99 pp.
RUSSIAN, bk, Silovyye Transformatory, Moscow, 1963, 94 pp.
JPRS 49424

Construction of Krivoy Rog Gres Continues, by Yu. Grafskiy, 5 pp.
RUSSIAN, np, Sotsialisticheskaya Industriya, Moscow, 15 Nov 1969, p 1.
JPRS 49477

Approximate Determination of Temperature Stresses in Seamless Forged Rotors, by V. A. Ablamakiy, G. A. Dzhepa. 9 pp.
RUSSIAN, rpt, Vsesoyuznoye Nauchno-Tekhnicheskoye Soveshchaniye Po Voprosam Prochnosti Materialov i Konstruktiivnykh Elementov pri Vysokikh Temperaturakh, 4th, Kiev. Termoprochnost' Materialov i Konstruktiivnykh Elementov, 1967, pp 502-508.
AIR/FTD/HT-23-1136-68

Ramjet Engine- A New Type of Aircraft Engine, by Hua Sa. 5 pp.
CHINESE, per, Hang K'ung Chih Shih, No 7, 1960, pp 17-21.
AIR/FTD/HT-23-1035-68

Gold-Plated Engine, by Chen Hua. 4 pp.
CHINESE, per, Hang K'ung Chih Shih, No 1, 1960 p 14.
AIR/FTD/HT-23-1142-68

Natural Frequencies of the Axial Vibration of Turbine Wheels, by V. Petrovsky. 21 pp.
CZECH, rpt, Oslostatna Konferencia o Problémoch Dynamiky Strojov. 2d, Smolenice, 1961. Bratislava, 1963, pp 126-149.
AIR/FTD/HT-23-568-68

Use of Actinide Elements in Isotopic Power Generators, by R. Berger, 17 pp.
FRENCH, per, Bull Infor Sci et Tech, No 104, 1966, pp 25-34.
AEC/ORNL-Tr-1495

Town Planning Aspects of the Construction of the Mullerstrasse and Theresienstrasse Power and Heat Supply Stations, by M. Gondosch.
GERMAN, per, Energie, Vol 11, July 1959, pp 285-303.
CEGB/C.E. Trans 5197

The Theresienstrasse Power and Heat Supply Station, by M. Gondosch.
GERMAN, per, Energie, Vol 11, July 1959, pp 303-310.
CEGB/C.E. Trans 5198

The Munich Heat Distribution System, by B. Prinke.
GERMAN, per, Energie, Vol 11, July 1959, pp 313-317.
CEGB/C.E. Trans 5200

The Problem of Noise Abatement in Power Stations, by B. Bublitz.
GERMAN, per, Mitt VGB, Vol 49, Apr 1969, pp 73-78.
CEGB/C.E. Trans 5210

The Principles of Power Station Planning, by S. Kriese.
GERMAN, per, Tech Mitt, Vol 58, No 1, 1965, pp 1-8.
CEGB/C.E. Trans 5010

Structural Change in Power Industry Seen, 11 pp.
GERMAN, per, Wochenbericht, West Berlin, 27 Nov 1969, pp 311-315.
JPRS 49517

Instability of Power Measurements in Three-phase Systems, by S. Bertini.
ITALIAN, per, Elettrotecnica, Vol 54, No 11, 1967, pp 832-836.
CEGB/C.E. Trans 5012

Progress of Electrification Described, by Octavian Groza, 12 pp.
RUMANIAN, per, Energetica, Bucharest, Aug 1969, pp 361-367.
JPRS 49425

Materials

Electrocrystallization of Metals, by A. P. Kapustin, An. N. Trofimov, 72 pp.
RUSSIAN, bk, Akademiia Nauk SSSR, Institut Kristallografiy, Moskva, 1969
*CFSTI TT 70-50036

Investigation of the Rheological Properties of Liquid Varnish and Paint Materials, by B.M. Smol'skiy, Z. P. Shul'man, et al. 24 pp.
RUSSIAN, bk, AN BSSR. Institut Teplo- i Massobmena. Teplo- i Massobmen v Nen'yutovskikh Zhidkostyakh Moskva, 1968, pp 198-216.
AIR/FTD/MT-24-306-68

Investigation of the Thermophysical Characteristics of Thin-Layer Polymer Coatings, by L. N. Novichenok. 19 pp.
RUSSIAN, bk, AN BSSR. Institut Teplo- i Massobmena. Teplo- i Massobmen v Nen'yutovskikh Zhidkostyakh Moskva, 1968, pp 217-230.
AIR/FTD/MT-24-306-68

Heat Transfer in Pseudoplastic Masses, by Yu. A. Terent'yev, V. D. Popov. 9 pp. RUSSIAN, bk, AN BSSR. Institut Teplo- i Massobmena. Teplo- i Massobmen v Nen'yutono- vskikh Zhidkostyakh Moskva, 1968, pp 265-271 AIR/FTD/MT-24-306-68

On the Question of the Rheological Model of Cement-Sand Solutions and Concrete Mixtures, by N. P. Bleshchik, K. F. Panysh. 9 pp. RUSSIAN, bk, AN BSSR. Institut Teplo- i Massobmena. Teplo- i Massobmen v Nen'yutono- vskikh Zhidkostyakh Moskva, 1968, pp 272-278. AIR/FTD/MT-24-306-68

The Modeling of Polymerizers With Scrapers, by V. I. Begachev, L. N. Braginakiy, et al. 8 pp. RUSSIAN, bk, AN BSSR. Institut Teplo- i Massobmena. Teplo- i Massobmen v Nen'yutono- vskikh Zhidkostyakh Moskva, 1968, pp 279-285. AIR/FTD/MT-24-306-68

A Study of the Structure of Sintered Aluminum Powder Material, by I. N. Fridlyander, Ya. D. Vishnyakov, et al. 11 pp. RUSSIAN, rpt, AN SSSR. Nauchnyy Sovet Kompleksnoy Probleme "Kibernetika" Voprosy Bioniki, 1967, pp 198-207. AIR/FTD/HT-23-1338-68

Processes of Diffusion in Metals, RUSSIAN, All-Union Scientific Conference on Diffusion in Metals and Alloys, Oct. 6-10 1964, 196 pp.

*CFSTI TT 70-50030

Investigation of the Process of Decomposition of Various Fractions of Light Oil at High Temperatures, by D. A. Aliyev, M. M. Ramazanade. 7 pp. RUSSIAN, per, Azerbaydzhanskoye Neftyanoye Khozyaystvo, Vol 47, No 2, 1968, pp 41-43. AIR/FTD/HT-23-426-69

Defects in Crystal Structure, by Ya. D. Vishnyakov. 224 pp approx. RUSSIAN, bk, Defekty Upakowki v Kristallicheskoj Struktury, 1970. CONSULTANTS BUREAU/PLENUM PRESS

Diffusion in Metals and Alloys, by V. Z. Bugakov, 212 pp. RUSSIAN, bk, Diffuziya v metallakh i refluviia, 1949 *CFSTI TT 70-50032

Electron Microscopic Investigation of Thin Metal-Polymer Coatings and Films, by A. M. Krasovskiy, V. A. Belyy. 5 pp. RUSSIAN, per, Doklady AN BSSR, Vol 12, No 12, 1968, pp 1097-1099. AIR/FTD/HT-23-428-69

Electronic Structure and Electronic Properties of Transition Metals and Alloys, by I. Ya. Dekhtyar, V. V. Nemoshkalenko. approx. 320 pp. RUSSIAN, bk, Elektronnaya Struktura i Elektronnnye Svoistva Perakhodnykh Metallov i Splavov, 1970. CONSULTANTS BUREAU/PLENUM PRESS

Gas Generation During Vacuum Heating of Silicon Steel, by V. Kochnov. RUSSIAN, per, Elektrotermiya Nauchn-Tekhn, No 45, 1965, pp 49-50. *BISI 7901

The Effect of Alloying and Heat Treatment on the Strength and Cavitation Resistance of Alloys With Age-Hardenable Martensite, by L. S. Malinov, T. M. Maslakova, et al. 11 pp. RUSSIAN, per, Energomashinostroyeniye, No 5, 1967 pp 29-32. AIR/FTD/HT-23-1147-68

Features of Fatigue Diagrams Under Fretting-Corrosion Conditions, by V. N. Stepanov. 5 pp. RUSSIAN, per, Fiziko-Khimicheskaya Mekhanika Materialov, Vol 3, No 3, 1967, pp 282-285. AIR/FTD/HT-23-1153-68

Investigation into Fatigue Strength of Chromium and Manganese-Nickel-Molybdenum [Boiler] Steels Under Conditions of Drastic Asymmetric Load Cycling and Exposure to Boiling Water, by I. V. Kudryavtsev, et al. RUSSIAN, per, Fiz.-Khim. Mekh. Mat. Vol 5, No 1, 1969, pp 6-10. IIB 7964

Residual Stresses in Iron and Steel After [Surface] Impregnation With Nitrogen, Carbon, And Boron, by V. G. Pemyakov, et al. RUSSIAN, per, Fiz. Khim. Mekh. Mat., Vol 5, No 3 1969, pp 297-301. IIB 8019

Type of GF-020 Primer, 7 pp. RUSSIAN, rpt, GOST 4056-63. ARM/FSTC/HT-23-638-69

Viscosimeters for Determining Viscosity of Paints, 7 pp. RUSSIAN, rpt, GOST 9070-59. ARM/FSTC/HT-23-639-69

Phenol-Formaldehyde Primer, 8 pp.
RUSSIAN, rpt, GOST 9109-59, 4/15, 1959.
ARM/FSTC/HT-23-637-69

Chemically Resistant Primer Enamel and Lacquer
"KMS" Type, 11 pp.
RUSSIAN, rpt, GOST 9355-60, 11/12 1960.
ARM/FSTC/HT-23-641-69

Resistance to Deformation of Alloy Steels During
Hot Working, by A. P. Kachailov.
RUSSIAN, per, Inst. Chem. Met. Nauchnye Trudi,
Vol 28, 1967, pp 193-196.
BISI 7289

Portion of Mg-Y-Zn Phase Diagram Rich in Magnesium,
by B. N. Zaslavyan.
RUSSIAN, per, Izv Ak Nauk SSSR, Metall, No 6,
1968, pp 191-194.
*ACSI-J-7819
FSTC/HT-23-491-70

Structural Changes in Some Ceramic Materials
Under Neutron Radiation, by N. S. Kostyukov,
N. P. Antonova, et al. 4 pp.
RUSSIAN, per, Izvestiya AN SSSR. Sibirskoye
Otdeleniye. Seriya Khimicheskikh Nauk, No 4,
1967, pp 43-46.
AIR/FTD/HT-23-1239-68

On the Efficient use of the Long Pauses During
Rolling in Reversing Mills, by N. I. Baymov.
RUSSIAN, per, Izv. VUZ Chern. Met., No 2, 1964,
pp 108-111.
BISI 7335

Selecting the Optimum Pauses For Rolling in
Reversing Mills, by N. I. Baimov.
RUSSIAN, per, Izv. VUZ Chern. Met., No 4, 1965,
pp 128-134.
BISI 7334

The Structure of a High-Chromium Alloyed Layer
on Castings of 0.30% C Plain Steel, by
G. Sh. Akhmetov, et al.
RUSSIAN, per, Izvest. VUZ. Chern. Met., Vol 8,
No 11, 1965, pp 153-157.
HB 7993

On the Problem of the Formation of Complex
Nuclei of the Oxide Phase During the Deoxidation
of Iron, by A. A. Vorob'yev, A. M. Levin.
RUSSIAN, per, Izv. VUZ Chern. Met., No 12, 1967,
pp 12-18.
BISI 6580

The Influence of Plastic Deformation of Steel
in the Austenitic State on the Impact Resistance
at Sub-Zero Temperatures, by D. I. Tarasko.
RUSSIAN, per, Izv. VUZ. Chern. Met., No 12,
p 140.
BISI 7514

Effect of Synthetic Slag Treatment of Bearing
Steel on the Nonmetallic Inclusions Content, by
V. G. Pegov., et al.
RUSSIAN, per, Izvest. VUZ- Chern. Met., Vol 12,
No 1, 1969, pp 59-62.
HB 7771

On the Geometry of Tube Forming, by
Yu. F. Shevakin, et al.
RUSSIAN, per, Izvest. VUZ- Chern. Met., Vol 12,
No 1, 1969, pp 95-100.
HB 7793

Monitoring the Composition of Steel by the
Thermoelectromotive Force Method, by
V. Yu. Kaganov, et al.
RUSSIAN, per, Izvest. VUZ- Chern. Met., Vol 12,
No 1, 1969, pp 182-185.
HB 7767

High Temperature Nitriding of 1K418H9T Stainless
Steel, by A. V. Bil'chenko.
RUSSIAN, per, Izv VUZ Chern Met., No 2, 1969,
pp 109-112.
*BISI 7891

On the Rational Regime of Operation of Blast
Furnace Stoves, by V. S. Kocho.
RUSSIAN, per, Izv VUZ Chern Met., No 3, 1969,
pp 29-30.
*BISI 7884

Residual Stresses in Sulfurized and Sulfo-Cyanided
Layers [On Steel], by V. V. Chekurlov, et al.
RUSSIAN, per, Izv. VUZ- Chern. Met., Vol 12, No 7,
1969, pp 148-150.
HB 8019

Electric Properties of Sized Glass Fabric, by
K. V. Ablyakimova. 5 pp.
RUSSIAN, per, Izvestiya VUZ. Khimiya i Khimi-
cheskaya Tekhnologiya, Vol 10, No 11, 1967,
pp 1254-1257.
AIR/FTD/HT-23-1253-68

Investigation of Wear Resistance of Hard-Alloy
Cutting Tools in Various Gas Media, by
N. S. Kolev. 5 pp.
RUSSIAN, per, Izvestiya VUZ Mashinostroyeniye,
No 10, 1966, pp 134-136.
AIR/FTD/HT-23-1112-68

One Hydrodynamic Model of a Solid Lubricant, by A. M. Mkhitranyan, A. F. Aksenov, et al. 5 pp.
RUSSIAN, per, Izvestiya VUZ. Mashinostroyeniye, No 1, 1968, pp 67-69.
AIR/FTD/MT-23-1271-68

Production and Properties of Some TiC-Base Cermets With an Alloy Steel Bond, by S. S. Kiparisov, V. K. Narva.
RUSSIAN, per, Izv. VUZ.-Tsvet. Met., Vol 12, No 3, 1969, pp 135-139.
HB 7982

Studies of the Flash, Resistance Sintering of Metal Powders. Part 3, by T. Sakai, Z. Hara
RUSSIAN, per, Journal of the Japan Society of Powder Metallurgy, Vol 16, No 3, 1969, pp 134-139.
HB 7944

Kinetics of Compressing Metallic Powders by Sintering, by V. A. Ivensen. approx. 208 pp.
RUSSIAN, bk, Kinetika Uplotneniya Metallicheskih Poroshkov Pri Spakanii, 1971.
CONSULTANTS BUREAU/PLENUM PRESS

Passivation of Tinplate, by M. Ye. Prasakou.
RUSSIAN, per, Kons Ovoch Prum, No 11, 1962, pp 27-30.
*BISI 7871

Crystal Chemistry of Silicides and Germanides, by Ye. I. Gladyshevskiy. approx 288 pp.
RUSSIAN, bk, Kristalloghimiya Silitsidov i Germanidov, 1971.
CONSULTANTS BUREAU/PLENUM PRESS

Cast Alloys Vol 1 of 2, by L. I. Levi, S. K. Kantanik. 553 pp.
RUSSIAN, bk, Litsymnye Splavy, 1967, pp 1-383 english pages
AIR/FTD/MT-24-461-68 Vol 1 of 2

Cast Alloys Vol 2 of 2, by L. I. Levi, S. K. Kantanik. 553 pp.
RUSSIAN, bk, Litsymnye Splavy, 1967, pp 384-553 english pages
AIR/FTD/MT-24-461-68 Vol 2 of 2

Heat-Resistant Glue Based on Organoelemental Compounds, by K. A. Andrianov, V. A. Kudishina, et al. 6 pp.
RUSSIAN, per, Mashinostroyitel', No 12, 1967, pp 20-21.
AIR/FTD/MT-23-1220-68

Influence of Counterbody Material on Friction Between Metal-Graphite Pair, by L. P. Grigorenko, L. A. Plutalova, et al. 9 pp.
RUSSIAN, per, Mashinovedeniye, No 1, 1968, pp 71-75.
AIR/FTD/MT-24-432-68

The Effect of Lactic Acid on the Electrodeposition of Nickel and Iron Alloys With Titanium, by G. I. Kadzhene, Yu. S. Bubyalis, et al. 7 pp.
RUSSIAN, rpt, Materialy Respublikanskoy Konferentsii Elektrokhimikov Litovskoy SSR, 8th VII'nyus 1966, pp 132-138.
AIR/FTD/MT-23-146-69

Reducing the Top Discard in Continuously Cast Billets and Slabs, by D. A. Dyudkin, et al
RUSSIAN, per, Metallurg, Vol 14, No 8, 1969, pp 25-27.
HB 7952

The Continuous Casting of Alloy Steel in Square-Section Molds, by V. P. Perminov, et al.
RUSSIAN, per, Metallurg, Vol 14, No 9, 1969, pp 16-18.
HB 8038

Continuous Casting of Carbon Steel on a Curved-Mold Machine, by V. T. Sladkoshtayev, et al.
RUSSIAN, per, Metallurg. i Gornorudn. Promyshlennost', Vol 10, No 2, 1969, pp 15-17.
HB 7795

Nonmetallic Inclusions in an 18-ton Ingot of Semikilled Steel, by V. A. Timoshenko, V. K. Barziy.
RUSSIAN, per, Metallurgich. i Gornorudnaya Promyshlennost', Vol 10, No 3, 1969, pp 12-14.
HB 7949

Plutonium Metallurgy, By A. N. Vol'skiy, Ya. M. Sterlin. 247 pp.
RUSSIAN, bk, Metallurgiya Plutoniya, 1967
*AEC-tr-7095
*UC-25
*CFSTI TT 70-50004

Diffusion Processes in Iron Alloys, by M. A. Krishtal, 280 pp.
RUSSIAN, bk, Metallurgizdat, 1963
*CFSTI TT 70-50031

Microhardness in Metals and Semiconductors, by V. M. Glazov, V. N. Vigdorovich. 248 pp.
RUSSIAN, bk, Mikrotverdost' Metallov i Poluprovodnikov, 1969.
CONSULTANTS BUREAU/PLENUM PRESS

Some Data on the Electroconductivity of Zirconium Dioxide Stabilized With Calcium Oxide in the Temperature Interval 600-1000°C, by I. M. Demonis, G. P. Kalliga, et al. 8 pp. RUSSIAN, rpt, Nauchno-Tekhnicheskoye Obshchestvo Chernoy Metallurgii. Moskovskoye Pravleniye. Vysokocognopomnyye Materialy, 1966 pp 110-115.
AIR/FTD/HT-23-1120-68

Petroleum Products, Properties, Quality, Application. 1-224 pp. Part 1 of 4. RUSSIAN, bk, Neftesrodukty: Svoystva, Kachestvo, Primeneniya. Spravochnik, 1966, pp 1-776.
AIR/FTD/HT-23-347-68 Part 1 of 4

Petroleum Products, Properties, Quality, Application. 225-460 pp. Part 2 of 4. RUSSIAN, bk, Neftesrodukty: Svoystva, Kachestvo, Primeneniya. Spravochnik, 1966, pp 1-776.
AIR/FTD/HT-23-347-68 Part 2 of 4

Petroleum Products, Properties, Quality, Application. 460-662 pp. Part 3 of 4. RUSSIAN, bk, Neftesprodukty: Svoystva, Kachestvo, Primeneniya. Spravochnik, 1966, pp 1-776.
AIR/FTD/HT-23-347-68 Part 3 of 4

Petroleum Products, Properties, Quality, Application. 663-886 pp. Part 4 of 4. RUSSIAN, bk, Neftesprodukty: Svoystva, Kachestvo, Primeneniya. Spravochnik, 1966, pp 1-776.
AIR/FTD/HT-23-347-68 Part 4 of 4

Some Possibilities offered by the Eddy-Current Method for Multiparameter Testing of Structural Components, by V. G. Vyakhorev, et al. RUSSIAN, rpt, Proc. Series: Non-destructive Testing in Nuclear Technology, I.A.E.A., Vienna, 1965, STI/PUB/105, pp 115-136.
BISI 7753

Metering Nozzles for Continuous Casting Tundishes With Automatic Control of Casting, by D. P. Yevtseyev, et al. RUSSIAN, per, Onepory, Vol 34, No 9, 1969, pp 43-46.
HB 8040

Oxidation and Protection of Beryllium, by I. I. Papirov. 108 pp. RUSSIAN, bk, Oksleniye i Zashchita Berilliya, 1968, pp 1-120.
AIR/FTD/HT-23-110-69

Fundamentals of Metallurgy. Rare Metals. pp 422-747. Vol 2 of 3. RUSSIAN, bk, Osnovy Metallurgii. Redkiye Metally, Vol 4, 1967, pp 1-651.
AIR/FTD/MT-24-160-68 Vol 2 of 3

Plastic Flow of Metals. 145 pp. RUSSIAN, bk, Plasticheskoe Tachenie Metallov, 1968.
CONSULTANTS BUREAU/PLENUM PRESS

Prestressed Reinforced Concrete in Construction of Nuclear Installations, by A. N. Komarovskiy, 156 pp. RUSSIAN, bk, Predvaritel'no Naprvashennyy Zhelezobeton v Stroitel'stve Yadernykh Ustanovok, Moscow, 1968, 140 pp.
JPRS 49481

Use of Natural Gas in Direct Reduction of Iron, by Kh. L. Fridman. RUSSIAN, per, Primenenie Prirodnogo Gaza v Chernoi Metallurgii, 1966, pp 65-72.
BISI 6755-V

Combustion of Natural Gas in Boiler Furnaces, by M. Ya. German. RUSSIAN, rpt, Primenenie Prirodnogo Gaza v Chernoi Metallurgii, 1966, pp 109-120.
BISI 6755 - IX

Rare Metals, 3rd edition, by O. A. Songina, 565 pp. RUSSIAN, mono, Redkie Metally. Izdanie 3, pererabotannoe i dopolnennoe, 1964
*CFSTI TT 70-50021

Utilization of Glass Plastics in Processing Equipment, by V. P. Kononov. RUSSIAN, per, Rybnoe Khoz, Vol 45, No 11, 1969, pp 58-61.
*Dept of Inter
BCF/OFF
*CFSTI TT 69-59000/11

Greater Use of Lightweight Concrete Parts Urged, by M. Chentemirov, 9 pp. RUSSIAN, per, Stroitel'naya Gazeta, Moscow, 7 Sept 1969, pp 1-2.
JPRS 49476

Weather Resistant Finish of Cellulose Fibers, by A. N. Stergiu. RUSSIAN, per, Tekstil'naya Promyshlennost, No 12, 1968, pp 57-58.
*ACSI-J-7823
*FSTC-HT-23-594-70

Heat-Resistant Inorganic Coatings (Selected Portions), by A. A. Appen. 186 pp.
RUSSIAN, bk, Temperaturostoychiyye Neorganicheskiye Pokrytiya, 1967, pp 1-106; 194-207; 215-329.
AIR/FTD/MT-24-497-68

Titanium Alloys for New Technology, by S. G. Glazunov. 109 pp.
RUSSIAN, bk, Titanovyye Splavy Dlya Novoy Tekhniki, 1968, pp 13-23, 24-35, 51-61, 176-186, 230-243, 262-271.
ACSI-J-7286
FSTC-HT-23-581-69

Degassing of Electro-chemical Steel in Vacuum, by P. Ya. Sorokin.
RUSSIAN, per, Trudy Inst Met Nauk SSR, Vol 2, 1958, pp 67-72.
*BISI 7868

Using a Coordinate Net in Investigating the Process of Jacketing Titanium Alloys Which Exhibit Anisotropy, by Yu. M. Aryshenskiy, I. I. Kaluzhskiy, et al. 9 pp.
RUSSIAN, per, Trudy Kuybyshevskiy Aviatsionnyy Institut, No 20, 1965, pp 61-68.
AIR/FTD/HT-23-155-69

Dependence of Structure and Properties of Titanium Alloy Forgings on Temperature and Degree of Deformation, by N. G. Yevlanov, G. S. Sakharov, 225 pp.
RUSSIAN, per, Trudy Obrabotka Davleniyem Aviatsionnykh Materialov, Moskovskiy Aviatsionnyy Tekhnologicheskii Institut, No 69, 1968, pp 155-170.
ARM/FSTC/HT-23-111-69

Physicochemical Interaction of Rhenium With Elements of the Platinum Group and Properties of Certain Alloys, by M. A. Tytkina, I. A. Tsyganova. 10 pp.
RUSSIAN, rpt, Trudy Soveshchaniya Vsesoyuznoye Soveshchaniye po Probleme Reniya. 2d, Moscow, 1962, Rений (Rhenium), 1964, pp 161-167.
AIR/FTD/MT-24-38-69

High-Strength Alloys of the Ti-Al-Mo-V System, by S. G. Glazunov, A. M. Chinenov, et al. 5 pp.
RUSSIAN, per, Tsvetnyye Metally, No 8, 1968, pp 91-92.
AIR/FTD/MT-24-28-69

The Influence of Ultrasonic Vibrations on the Effectiveness of Lubricants During Free Compression of Aluminum, by V. P. Severdenko, V. V. Petrenko, et al. 6 pp.
RUSSIAN, per, Vestsi AN BSSR. Seriya Fizika Tekhnichnykh Navuk, No 2, 1968, pp 103-105.
AIR/FTD/MT-24-143-69

Investigation of the Dependence of the Strength of Glass-Reinforced Plastics on the Diameters of Reinforcing Fibers, by N. A. Osnach, V. T. Popov, et al. 7 pp.
RUSSIAN, per, Vsesoyuznyy Nauchno Issledovatel'skiy Institut. Nobykh Stroitel'nykh Materialov, No 7, 1966, pp 10-14.
AIR/FTD/MT-24-42-69

Corrosion Resistance of Ti-0.27% Pd Products Alloys Manufactured Industrially, by N. D. Tomashov. 7 pp.
RUSSIAN, per, Zashchita Metallov, Vol 5, No 5, 1966, pp 491-495.
ACSI-J-7714
FSTC-HT-23-493-70

The Irradiation Effect of Ceramic Materials, by N. S. Kostyukov. 21 pp.
RUSSIAN, per, Zhurnal Vses Khim Obshe im. D. I. Mendeleeva, Vol 13, No 2, 1968, pp 193-200.
NASA TT F-12,651

Method of Obtaining Silicate Paints, by K. I. Karasev, Z. V. Kurochkina, et al. 2 pp.
RUSSIAN, Patent No. 149,519, 17 Nov 1961, 1966, p 1.
AIR/FTD/HT-23-1241-68

A Lubricant for the Cold Rolling of Metal, by R. I. Tarasenko, P. I. Chuyko, et al. 1 pp.
RUSSIAN, Patent No. 182,660 26 Aug 1963, 1966, pl.
AIR/FTD/HT-23-204-69

Method of Obtaining Sulfol, by A. A. Beer, S. O. Skvortsov, et al. 2 pp.
RUSSIAN, Patent No. 182,723, 14 Apr 1965, p 1.
AIR/FTD/HT-23-1244-68

Lubricating-Cooling Fluid for the Honing of Metals, by N. N. Klyunin, A. M. Zlotin, et al. 1 p
RUSSIAN, Patent No. 187,916, 23 Jan 1965, 1966, p 1.
AIR/FTD/HT-23-1498-68

Method of Depositing Electroconducting Coatings,
by A. D. Tumul'kan. 3 pp.
RUSSIAN, Patent No. 191,001, 7 Jun 1965, 1967,
pp 1-2.
AIR/FTD/HT-23-1481-68

Optically Sensitive Material, by
B. F. Ponomarenko, P. I. Ulyakov. 2 pp.
RUSSIAN, Patent No. 198,768, 25 Apr 1966, 1967,
p 1.
AIR/FTD/HT-23-1243-68

A Method of Curing Silicon-Containing Epoxy
Polymers, by V. D. Orlova, L. N. Zhinkina,
et al. 3 pp.
RUSSIAN, Patent No. 200,155, 25 Oct 1965, 1967,
pp 1-2.
AIR/FTD/HT-23-1246-68

Method for Preparing a Liquid Lubricant Coolant,
by A. I. Grigor'yeva, I. D. Afanas'yev, et al.
2 pp.
RUSSIAN, Patent No. 210,995, 30 Nov 1965, 1968,
p 1.
AIR/FTD/HT-23-1399-68

A Lubricant for the Hot Plastic Working of Metals,
by S. Ya. Veyler, P. D. Vovchuk. 2 pp.
RUSSIAN, Patent No. 215,379, 6 Feb 1967, 1968,
p 1.
AIR/FTD/HT-23-203-69

Aluminum Ceramic Anodic Oxidation, by
Fu-ming Chu. 3 pp.
CHINESE, per, K'o Hsueh Hua Pao, No 6, 1966,
p 242
AIR/FTD/HT-23-839-68

Operational Tests on New Oil Emulsions for
Cold Steel Strip Rolling, by V. Dedek.
CZECH, per, Hutn Listy, No 2, 1964, pp 102-108.
*BISI 7880

Determination of Basicity and FeO Content of
Steel Slag by Measurement of the Heat of
Reaction, by M. Mouck.
CZECH, per, Hutn Listy, Vol 20, No 3, 1965,
pp 207-209.
*BISI 7863

Production Scheduling, Static Model, by
P. Caslavsky.
CZECH, per, Hutn. Listy, Vol 23, No 5, 1968,
pp 333-338.
BISI 7070

Effect of Some Elements and Operational Conditions
on the Hot Formability of Carbon Steels, by
P. Benda, V. Paur.
CZECH, per, Hutn. Listy, Vol 23, No 7, 1968,
pp 473-478.
BISI 7145

Effect of Thickness, Rolling and Heat-Treatment
Conditions on Properties of Plates, by
K. Matuska.
CZECH, per, Hutník, Vol 19, No 7, 1969,
pp 260-264.
*BISI 7826

Influence of the Crude Fluxing Agent in the
Blast Furnace Process on the Specific Con-
sumption of Coke and Blast as Well as on the
Specific Production of Blast Furnace Gas, by
A. Geras.
CZECH, rpt, Paper 1/2-13 Presented at the 5th
Conference on Industrial Power Economy,
Prague, 1967.
*BISI 7803

A Contribution to the Methodology of Evaluating
Corrosion Measurements, by J. Edelman, et al.
CZECH, per, Plyn, Vol 49, No 8, 1969, pp 233-236
*BISI 7829

Some Possibilities for Using Chromatographic
Methods in the Analysis of Mineral Raw
Materials, by J. Michal.
CZECH, per, Rudy, Vol 15, No 11, 1967,
pp 377-384.
BISI 7051

Theoretical Principles for Reducing Coke Consump-
tion in Blast Furnace Process, by L. Broz.
CZECH, rpt, Sbornik Prednasek z Konference o
Rozvoji Hutnictvi, Ostrava, 1966, Nov., 22-24,
pp 107-122.
BISI 7072

Theoretical Question Concerning the Piercing
Property of Steels, by V. Heinrich, O. Pejnoch.
CZECH, rpt, Sbornik Sump. "Stiefel VZKG" Paper E,
BISI 7430.

Determination of the Phosphorus Content of
Carbides, by R. Kamensky, K. Kurzova.
CZECH, per, Sbornik VSB Ostrava, Vol 14, No 1,
1968, pp 67-73.
BISI 7302

The Graphical and Numerical Method for Establishing
the Order of the Metal Heating, by R. Kremer.
CZECH, per, Sbornik V.S.B. Ostrava, Vol 14, No 2,
1968, pp 71-92.
*BISI 7830

A Contribution to the Problem of Reducing the Scaling Losses in Heating Furnaces, by K. Obrůčka.
CZECH, per, Sbornik V.S.B. Ostrave, Vol 14, No 2, 1968, pp 93-98.
*BISI 7831

A Contribution to the Problem of the Rate of Flow, by K. Obrůčka.
CZECH, per, Sbornik V.S.B. Ostrave, Vol 14, No 2, 1968, pp 99-108.
*BISI 7832

Effect of Grain Boundary Serration in Creep of an Fe-3% Si alloy, by V. Sklenicka, J. Cadak.
CZECH, per, Sbornik V.S.B. Ostrave, Vol 14, No 2, 1968, pp 109-118.
*BISI 7833

Effect of Main Alloying Elements of Properties and Hot Forming Property of Medium-Alloyed Steels, by M. Zidek.
CZECH, per, Sbornik V.S.B. Ostrave, Vol 14, No 2, 1968, pp 119-135.
*BISI 7834

Hangers of Superheater Coils Fabricated by Welding Chromium Steel Parts to Low Alloy Steel Parts, by M. Holy, J. Cervanka.
CZECH, per, Strojinstvi, Vol 18, No 8, 1968, pp 600-604.
BISI 7091

Creatine Phosphokinase and Operation, by Niels Schwartz Sorensen. 10 pp.
DANISH, per, Ugeskrift for Læger, No 45, Nov 1965.
ACSI-J-7752

Researches on the Possibilities of Improvement of Conditions of Engagement During Rolling, by T. Solkowski, A. Vilain.
FRENCH, per, ATB Mat., Vol 8, No 2, 1968, pp 87-96.
BISI 7138

Use of Radionuclides to Label Refractory Materials Used in the Foundry, by Cl. Descamps.
FRENCH, per, Bull. Soc. Fr. Ceram. Jan-Mar. 1968, pp 61-71.
BISI 6918

The Application of Modern Weighing Techniques in Steelworks, by V. Gallois.
FRENCH, per, C.D.S.Circ., No 12, 1967, pp 2643-2678
BISI 6573

Management of Ingot Mould Stock by 'Mechanography', by P. Knaff, et al.
FRENCH, per, C.D.S. Circ., No 9, 1968, pp 1941-1953
BISI 7064

Brittleness Tests
II - Tests of Brittle Fracture on Large Specimens: Robertson, Pellini, Patella, by A. Cheviet, M. Pruchon.
FRENCH, per, C.D.S. Circ., No 9, 1968, pp 2013-2027.
BISI 7142

Graphite Nuclei in Cast Iron for Ingot Molds, by P. Poyet, et al.
FRENCH, per, Fonderie, Vol 277, No 4, 1969, pp 183-
*BISI 7851

The Quality of Steel Castings and its Relation to the Nitriding, Carburizing or Decarburizing Effect of Molds, by P. Detrez, et al.
FRENCH, per, Fonderie, Vol 278, No 5, 1969, pp 211-
*BISI 7849

Recent Developments in Production of Steels for Drop Forging Dies, by R. Unbaud.
FRENCH, rpt, Formage Trait. Mat., pp 35-41.
*BISI 7858

Sintering and Hot Pressing of Monoxide Refractory Compounds, Borides, Carbides, Nitrates and Silicides, by H. Pastor. 43 pp.
FRENCH, per, L'Ind Ceram, No 615, Feb 1969, pp 89-105.
NASA TT F-12,474

The Closure of Metal Preserving Cans, by J. Guers.
FRENCH, per, Revue de la Conserve, No 6, 1969, pp 109-116.
*BISI 7872

Experimental Study on Charging of Coke Ovens With Preheated Coal, by P. Foch, et al.
FRENCH, per, Rev. Gen. Therm. Vol 4, No 6, 1965, pp 655-676.
BISI 7551

The Role of Quartz in the Development of Pneumoconiosis in Coal Miners, by A. Policard.
FRENCH, per, Rev. Ind. Minerale, Vol 49, No 9, 1967, pp 641-648.
BISI 6318

Bulk Blending of Materials - Case of Iron Ore,
by W. A. Bemelman.
FRENCH, per, Rev Ind Minerale, Vol 50, Mar 1968,
pp 234-44.
*BISI 7814

Effect of Some Grinding Conditions on Grinding
Charges and Linings, by G. Huyet, et al.
FRENCH, per, Rev. Ind. Minerale, Vol 51, No 3,
1969, pp 220-
*BISI 7846

Standard Gas Mixtures and Their Use in Iron
and Steel Works, by J. Burton.
FRENCH, per, Rev Met, Vol 64, Jan 1967,
pp 73-80.
*BISI 7887

Study of Heat Treatments After Deformation for
Two Low-Alloy Structure Steels, by C. Leymonie
FRENCH, per, Rev. Met., Vol 66, No 3, 1969,
pp 221-
*BISI 7847

Olegoements and Alloys, by L. Colombier.
FRENCH, per, Rev Met, Vol 66, June 1969,
pp 421-431.
*BISI 7876

Influence of Nickel, Silicon and Molybdenum on
the Corrosion of Austenitic "Iron-Chromium-Nickel"
in Superheated Steam, by H. Coriou, et al.
FRENCH, per, Rev. Met. Mem. Sci., Vol 65, No 9,
1968, pp 643-650.
BISI 7446

Recrystallization of Austenite After High Speed
Deformation, by J. Pluhar, et al.
FRENCH, per, Rev. Met. Mem. Sci., Vol 66, No 2,
1969, pp 117-123.
BISI 7686

Contribution to the Study of Plastic Deformation
of Iron, by P. Vagnieux, et al.
FRENCH, per, Rev. Met. Mem. Sci., Vol 66, No 3,
1969, pp 189-
*BISI 7843

Deep Drawability of Austenitic Stainless Steels
in Relation to Coefficients of Work Hardening
and Anisotropy, by J. Lefevre, et al.
FRENCH, per, Rev. Met. Mem. Sci., Vol 66, No 4,
1969, pp 255-262.
*BISI 7859

Workhardening and Recrystallization of Steels by
Plastic Deformation at High Temperatures, by
C. Rossard, et al.
FRENCH, per, Rev. Met. Mem. Sci. Vol 66, No 4,
1969, pp 263-
*BISI 7848

Resistance to Fatigue in Pre-Stressed Reinfor-
cement, by R. Baus, A. Brenneisen.
FRENCH, rpt, Symposium on Pre-stressed Steels,
International Federation Madrid, 1968.
BISI 6989

Chromaluminisation, by E. Genieys.
FRENCH, per, Traitement Therm, Vol 19, Jan-Feb
1966, pp 17-22.
*BISI 7902

Shaped Polyurethanes, by Chemische Fabrik
Kalk GmbH in Federal Republic of Germany.
French Patent No. Fr 1,490,316
25 Aug. 1966
*NASA TTF 12,834

The Casting of Steel in Continuous Casting
Machines - Possibilities of Rational Production,
by U. Petersen.
GERMAN, rpt, Arbeitsgemeinschaft fur Rationali-
sierung des Landes Nordrhein-Westfalen, No 102,
40 pp.
*HB 8000

Recarburization of Plain Carbon Steel During
Oxy-acetylene Cutting, by J. Krahe.
GERMAN, per, Arch Eisenh, Vol 39, May 1968,
pp 347-351.
*BISI 7808

Comparative Tests on the Corrosion Resistance
of Galvanized and Aluminized Sheet Steel, by
G. Burgmann, W. Schwenk.
GERMAN, per, Arch. Eisenh, Vol 39, No 8, 1968,
pp 623-628.
BISI 7311

High-Strength Maraging Nickel Steels, by
K. Bungardt, et al.
GERMAN, per, Arch. Eisenh, Vol 39, No 10, 1968,
pp 719-731.
BISI 7208

Deformation and Stress State in Smooth and
Notched Bending Test Pieces With Regard to
Testing the Brittle Fracture Tendency of Steels,
by A. Kochendorfer, et al.
GERMAN, per, Arch. Eisenh, Vol 39, No 10, 1968,
pp 769-777.
BISI 7508

The Equilibria Between Iron and Lime-Saturated
Sulphur-containing Iron Oxide Slags at 1400 and
1600°C, by G. Tromel, et al.
GERMAN, per, Arch. Eisenh, Vol 40, No 2, 1969,
pp 87-
*BISI 7845

Reduction of High-Alumina Refractories in Iron-Carbon Melts, by H. Maas, H. Abratis. GERMAN, per, Arch. Eisenh., Vol 40, No 2, 1969, pp 153-157. BISI 7390

Evaluation of Bend Tests for the Determination of the Tensile Flow Curve From the Bending Flow Curve, by A. Kochendorfer, et al. GERMAN, per, Arch. Eisenh., Vol 40, No 2, 1969, pp 163-172. BISI 7507

Fabrication of Bars and Tubes From Metal Powders by the Extrusion Process, by G. Naesser, O. Wessel. GERMAN, per, Arch. Eisenh., Vol 40, No 3, 1969, pp 257-262. BISI 7283

The Mechanism of Rust Formation on Weather-Resistant Steel, by G. Becker, et al. GERMAN, per, Arch. Eisenh., Vol 40, No 4, 1969, pp 341-349. BISI 7448

Range of Application of Stabilized Zirconium Dioxide as a Solid Electrolyte in the Electro-Chemical Determination of Oxygen in Liquid Steel, by E. Forster, H. Richter. GERMAN, per, Arch. Eisenh., Vol 40, No 6, 1969, pp 475-478. BISI 7605

The Growth of Austenite Grain of Plain Carbon Steels at 7000 to 1200°C, by A. Domsa. GERMAN, per, Arch Eisenh., Vol 40, June 1969, pp 489-492. *BISI 7886

Reduction of Iron Ores Accelerated by the Addition of Nucleants, by W. Morawietz, H.-D. Schaefer. GERMAN, per, Archiv Eisenh., Vol 40, No 7, 1969, pp 531-533. HB 7911

The Hot Torsion Test On Deformation Characteristics of Steels at Elevated Temperatures, by K. H. Weber. GERMAN, per, Arch. Eisenh., Vol 40, No 7, 1969, pp 541-550. *BISI 7835

Saturated States of Slags of the Oxygen Top-Blowing Process With Low Phosphorus Pig Iron and Their Paths of Concentration in the Quasi-Ternary System (CaO)-(SiO₂)-(FeO), by F. Bardenheuer, et al. GERMAN, per, Arch. Eisenh., Vol 40, No 8, 1968, pp 571-576. *BISI 7840

Contribution to the Theory of the Metallurgical Processes During the Solidification of Steel, by F. Oeters. GERMAN, per, Arch Eisenh., Vol 40, Aug 1969, pp 603-613. *BISI 7818

Equipment for Perfect Coiling on Slitting Lines, by F. Foulon. GERMAN, per, A.S.U.G. Mitt., Vol 4, No 3, 1967, pp 224-231. *BISI 7897

Properties of Polythene Coatings on Steel Tubes, by V. Hauk. GERMAN, per, Bander Bleche, Vol 10, No 5, 1969, pp 274-279. *BISI 7893

New Plate Finishing Equipment for Sweden, by G. Fries. GERMAN, per, Blech, Vol 16, No 4, 1969, pp 217-221. BISI 7401

Math Model for Calculating the Heat Extraction From Non-Luminous Jet Flames in Combustion Chambers, by R. Gunther. GERMAN, per, B.-W.K., Vol 20, No 5, 1968, pp 200-205. *BISI 7857

Contribution to a Study of the Formation and Reduction of Chrome and Manganese Oxide-Bearing Slags in the Production of Stainless Steels by the Oxygen Remelting Process in the Basic Arc Furnace, by W. Biesterfeld. GERMAN, per, DEW-Techn Ber., Vol 9, No 1, 1969, pp 16-48. *BISI 7894

Investigation of Precipitation Behavior of Small Amounts of Boron in a Steel with 16% Cr and 13% Ni, by H. Brandis. GERMAN, per, DEW-Techn Ber., Vol 9, No 2, 1969, pp 213-217. *BISI 7807

Causes of Disintegration of Hematite Pellets of Very Pure Magnetite Concentrate During Reduction and Attempts to Improve Quality, by M. Ottow. GERMAN, Diss. Approved by Tech. Univ. of Berlin, 1966. BISI 6727

Scientific
Materials (Contd)

Internal Stresses in Drawn Steel Wire, by
H. Beuhler.
GERMAN, per, Draht, Vol 19, Aug 1968,
pp 531-537.
*BISI 7804

Wire Drawing with Superimposed Ultrasonic
Vibrations, by R. Pohlmann.
GERMAN, per, Draht, Vol 19, Oct 1968,
pp 757-765.
*BISI 7805

Thermometry in the Drawing of Steel Wire During
Practical Operations, by R. Bruhl.
GERMAN, per, Draht Welt, Vol 55, July 1969,
pp 413-417.
*BISI 7875

The Quality of Steel Castings and its Relation
to the Nitriding, Carburizing or Decarburizing
Effect of Molds, by P. Detrez, et al.
FRENCH, per, Fonderie, Vol 278, No 5, 1969,
pp 211-
*BISI 7849

Steel Castings for Nuclear Power Plant, by
H. Luling, W. Gysel.
GERMAN, per, Giesserei, Vol 55, 6 Jun 1968,
pp 331-345.
BISI 7696

Welding of Austenitic Cast Iron With Spheroidal
Graphite, by E. Theis, G. Gawlas.
GERMAN, per, Giesserei, Vol 56, No 3, 1969,
pp 140-146.
BISI 7389

Use of Insulating Materials in the Foundry,
by A. Steger.
GERMAN, per, Giesserei, Vol 56, May 1969,
pp 276-280.
*BISI 7816

Experience in Using the Gas Vapor (Cold Box)
Method for the Production of Cores, by
R. Nagele.
GERMAN, per, Giesserei, Vol 56, No 11, 1969,
pp 298-304.
*BISI 7810

Testing the hot Shearing Resistance as a New
Method of Assessing the Behaviour of Moulding
Sand Surfaces When Subjected to Sudden Intense
Radiant Heat, by F. Hofmann.
GERMAN, per, Giesserei, No 56, 1969, pp 409-416.
*BISI 7838

Scientific
Materials (Contd)

Present State of the Technical Development of
Coke Oven Plants in Germany, by K.G. Beck.
GERMAN, per, Gluckauf, Vol 105, 1969, Feb,
pp 160-165.
*BISI 7867

Investigation of the Diffusion and Solubility
of Hydrogen in Killed and Rimming Mild Steel,
by U. Tenhaven.
GERMAN, per, Hoesch Ber., Vol 2, No 2, 1967,
pp 68-76.
BISI 7324

Manufacture and Characterisation of Ultrafine
Carbides? Nitrides and Metals, by
E. Neuenschwander.
GERMAN, per, J. Less-Common Met., Vol 11, No 11,
1966, pp 365-375.
BISI 7350

Basic Types and Variants of Continuous Casting
Machines for Steel, by H. G. Baumann, H. Hinze.
GERMAN, per, Kleppzig Fachberichte, Vol 76, No 12,
1968, pp 739-744.
HB 7748

Electrical Equipment of the Hunedoara Blooming
Mill Train, by E. Heimes, A. Riegel.
GERMAN, per, Kleppzig Fachber., No 6, 1969,
pp 390-398.
BISI 7679

Ultrasonic Determination of Defect Size in Steel
Plate Allowing for the Near-field Structure, by
P. Holler, H. Smit.
GERMAN, per, Materialprufung, Vol 11, No 5,
1969, pp 150-155.
HB 7825

Ultrasonic Inspection of C.R. Strip With Lamb
Waves by the Echo Method, by P. Moller.
GERMAN, per, Materialprufung, Vol 11, No 10,
1969, pp 328-335.
*HB 8026

Creep Properties of Soft Solders, by A. Keil, 9 pp.
GERMAN, per, Metall, No 11, 1957, pp 740-742.
AEC/SC-Tr-69-1037

Design of a New Shaft Furnace for the Sintering
of Iron Ores, by Ya. Bukhval'der, et al.
GERMAN, per, Neue Hutte, Vol 13, No 10, 1968,
pp 586-590.
HB 7667

Contribution to the Shaping of Continuously Cast [Steel] Billets Directly from Casting Heat, by B. Tammann.
GERMAN, per, Neue Hutte, Vol 14, No 7, 1968, pp 389-395.
HB 7926

Contribution to Hydrodynamic Lubrication During Wire Drawing, by K. D. Lietzmann, J. Bittersmann.
GERMAN, per, Neue Hutte, Vol 14, No 1, 1969, pp 32-37.
BISI 7742

An X-ray Instrument for the Continuous Recording of Flue Dust, by J. Holzhey.
GERMAN, per, Neue Hutte, Vol 14, Apr 1969, pp 198-201.
*BISI 7883

Electrochemical and Crystal Growth Phenomena During the Phosphate Coating of Metals, by W. Machu.
GERMAN, per, Neue Hutte, Vol 14, No 4, 1969, pp 238-241.
HB 7896

Investigation of Effect of Material in Cold Upsetting, by W. Lehnert.
GERMAN, per, Neue Hutte, Vol 14, May 1969, pp 270-275.
*BISI 7874

Ore Mining Minister Reports Metal Refining Trends, by Kurt Singhuber, 9 pp.
GERMAN, per, Neue Hutte, Leipzig, Oct 1969, pp 578-582.
JPRS 49517

Tasks of Metallurgical Trade Enterprise Outlined, by Manfred Taube, Wilfried Lammert, 7 pp.
GERMAN, per, Neue Hutte, Leipzig, Oct 1969, pp 583-585.
JPRS 49517

Comparative Experiments on Pressing and Sintering Techniques on a new Type of Electrolytic Iron Powder, by G. Jangy, et al.
GERMAN, per, Plaste Kautschuk, Vol 15, No 8, 1967, pp 103-115.
BISI 6988

Optical and Electron Microscopic Comparison of Structures Produced by Quenching and Tempering, by K. L. Maurer, F. Jeglitsch.
GERMAN, per, Radex Rund., Nos 3 & 4, 1967, pp 539-540.
BISI 6605

Bron-Methylacetate as an Etchant for Special Steels, by H. Sauer, H. Rnochl.
GERMAN, per, Radex Rund. Nos 3 & 4, 1967, pp 641-645.
BISI 6578

High-Speed Cinematography of the Martensite Transformation, by R. Mitsche, et al..
GERMAN, per, Radex Rund., Nos 3 & 4, 1967, pp 705-710.
BISI 6575

Some Examples of Electron Microscopy in Metallography, by K. L. Maurer.
GERMAN, per, Radex Rund., Nos 3 & 4, 1967, pp 733-741.
BISI 6569

Microscopical Investigations of Locally Greatly Overheated Specimens of Portland Cement Clinker Coating From Large Rotary Cement Kilns, by W. Polesnig.
GERMAN, per, Radex Rundschau, Nos.4/5, 1968, pp 342-347.
*BISI 7839

Rapid Thermometric Analysis of Magnesite and Dolomite, by I. Sajo, B. Sipos.
GERMAN, per, Radex Rund., No 7, 1968, pp 178-187
BISI 7048

The True Breaking Toughness in the Impact Test - A New Notched Bar Specimen, by U. Issarescu.
GERMAN, per, Schweiz. Arch., Vol 34, No 2, 1968, pp 40-49.
BISI 6665

Desulphurization of Pig Iron Outside the Blast Furnace, by W. Domalski, et al.
GERMAN, per, Stahl Eisen, Vol 88, 22 Aug 1968, pp 906-919.
BISI 7046

The Guniting of Refractory Linings [of Iron and Steelmaking Furnaces], by G. Kaufel, H. Hillebrand.
GERMAN, per, Stahl und Eisen, Vol 89, No 1, 1969, pp 14-17.
HB 7707

Study of Wear on the Refractory Lining of a Blast Furnace Having a Hearth Diameter of 7.5 Meters, by H. Wysocki, et al.
GERMAN, per, Stahl Eisen, vol 89, No 7, 1969, pp 342-
*BISI 7850

Study of the Mechanical Behaviour of Iron Ores and Pellets Under Isothermal Reduction Conditions, by O. Burghardt, K. Grebe.
GERMAN, per, Stahl Eisen, Vol 89, No 11, 1969, pp 561-573
*BISI 7844

Calculation of the Cooling Curves Obtained in Oil - and Air-Quenching of Cylindrical and Flat Work-Pieces of Alloyed Heat-Treatable Steel by Means of an Electronic Computer, by F. Hengerer, et al.
GERMAN, per, Stahl Eisen, Vol 89, 12 Jun 1969, pp 641-654.
BISI 7595

The Present State and Development of the Production of Nuclear Power, by A. Buch.
GERMAN, per, Stahl Eisen, Vol 89, 26th June 1969 pp 696-704
*BISI 7841

Operating Experience in the Production of Low-carbon Steels for Flat Products in the Oxygen Converter, by G. Bauer, et al.
GERMAN, per, Stahl Eisen, Vol 89, 7 Aug 1969, pp 853-859.
BISI 7746

Networkplanning in the Maintenance Services of Iron and Steel Works, by E. Becker.
GERMAN, per, Stahl Eisen, Vol 89, Aug 1969, pp 872-877.
*BISI 7811

Effect of Sinter Sizing as Well as of Sinter and Slag Basicity on the Production of Basic Pig Iron, by D. Schulz, et al.
GERMAN, per, Stahl Eisen, Vol 89, 21 Aug, 1969, pp 905-917.
*BISI 7837

Melting Samples for Spectrographic Analysis Automation and Operating Experience, by P. Moller.
GERMAN, per, Stahl Eisen, Vol 89, Aug 1969, pp 948-955.
*BISI 7865

Pit Furnace, Soaking Pits and Pusher Furnaces as Operating Facilities for the Rolling Mill Crew of High Capacity Rolling Mill Trains, by F. Weber.
GERMAN, per, Stahl Eisen, Vol 89, No 18, 1969, pp 994-1004.
*BISI 7856

Checking the Quality of Lime for Steelmaking, by P. Konig.
GERMAN, per, Stahl Eisen, Vol 89, No 22, 1969, pp 1231-1235.
*HB 8024

Development of Mass-produced Steels, by D. Schauwinhold.
GERMAN, per, Thyssenforschung, Vol 1, No 1, 1969, pp 20-29.
*BISI 7809

Reactions Between Iron and Slag in the Blast Furnaces, by B. Gerstenberg.
GERMAN, per, Thyssenforschung, Vol 1, No 3, 1969 pp 81-91.
*BISI 7836

Influence of Steam and Carbon Dioxide on the Oxidation of Iron Silicon Alloys in Oxygen Between 750 and 1050°C, by A. Rahmel, J. Tobolski.
GERMAN, per, Werkst. Korros., Vol 16, No 8, 1965, pp 662-676.
BISI 6304

Investigation of Corrosion Damage by Means of Beta Radiation Scattering, by V. Krivan.
GERMAN, per, Werkst. Korros., Vol 19, No 12, 1968 pp 1021-1025.
BISI 7279

Investigations into the Electrolytic-Potentiostatic Etching of Stainless Steels in 10 N NaOH, Using a Coulometer, by G. Grutzner, H. J. Schuller.
GERMAN, per, Werkst. Korros., Vol 20, No 3, 1969, pp 183-194.
BISI 7447

Silicon Nitride - A Corrosion Resistant High Temperature Material, by Von H. Feld.
GERMAN, per, Werkstoffe und Korrosion, Vol 20, No 7, 1969, pp 571-574.
*NASA TT F-12,846

Static and Dynamic Investigations on Follow-up Systems With Parameter Controls, by J. Petermann.
GERMAN, per, Wissensch. Z.T.H. Karl-Marx-Stadt, Vol 8, 1966.
BISI 7466

Laser Application in the Field of Treating Materials, by S. Panzer.
GERMAN, per, ZAMP, Vol 16, 1965, pp 138-141.
Dept of Navy APL/JHU T-2366

Dependence of Spectrometric Sulphur Determination on the Anisotropy of Deformed Sulphides in Steels, by W. Koch, et al.
GERMAN, per, Z. Analyt. Chem., Vol 225, No 2, 1967 pp 196-203.
BISI 6670

Breakaway Mechanism During the Corrosion of Zirconium, by Georg Ullrich, 13 pp.
GERMAN, per, Z Metallk., Vol 59, 1968, pp 292-296.
AEC/WAPD-Tr-122

Continuous Casting of Steel, by H. vom Ende.
GERMAN, per, Zeit Metallk., Vol 60, No 4, 1969, pp 258-266.
*BISI 7813

Structure of Continuous Castings and Effects on the Mechanical Properties, by W. Dahl.
GERMAN, per, Zeit Metallk., Vol 60, No 5, 1969, pp 340-350.
*BISI 7812

On the Theory of Coercive Force, by M. Kersten.
GERMAN, per, Z. Physik, Vol 124, No 9, 1948, pp 714-741.
BISI 7214

Submerged Arc Overlays of 18/18 Stainless Steel and Nickel for Corrosion Resistance and 18% Cr Steel for Hardness are Described, by G. Almquist.
GERMAN, per, Zent Schweisstechnik Mitt., Vol 10, Jan 1968, pp 4-20.
*BISI 7877

Noninflammable Polyurethane Foams, by Ferdinand Meyer, 3 pp.
German Patent No. 1,177,816
14 Feb. 1963
*NASA TTF 12,833

The Effect of Thermomechanical Treatment on the Microstructure and Properties of Heat-resistant NiCr Alloys, by R. Riman.
HUNGARIAN, per, Kohaszat, Vol 102, No 6, 1969, pp 263-267.
*ACSI-J-7813
*FSTC-HT-23-494-70

Testing the Wear Resistance of Plastics Having Crystalline Structures, by E. Vadasz. 18 pp.
HUNGARIAN, per, Manyag es Gumi, No 12, 1967, pp 405-411.
AIR/FTD/HT-23-1192-68

Fracture Toughness of Mild Steels as a Function of their Tensile Strength and Microstructure, by P. Brozzo.
ITALIAN, per, Met. Ital., Vol 51, No 10, 1967, pp 789-800.
BISI 6577

Some Results of Research on Automation of the Blast Furnace at Pionbino, by T. Barbieri, et al.
ITALIAN, per, Met. Ital., Vol 59, No 10, 1967, pp 861-869
BISI 6568

Observations on the Influence of the Main Alloying Elements on the Transformation Points of Steel, by A. Masi, P. Ravizza.
ITALIAN, per, Met. Ital., Vol 60, No 1, 1968, pp 32-36.
BISI 7042

General Plan of a Dynamic Control System for the L/D Process, by G. Bozza, et al.
ITALIAN, per, Met. Ital., Vol 61, No 3, 1969, pp 96-
*BISI 7842

Factors Governing the Quality of Austenitic Stainless Steel Tubes, by F. Citterio, A. Myallonnier.
ITALIAN, per, La Metallurgia Italiana, Vol 61, No 5, 1969, pp 195-200.
HB 7912

Critical Considerations About the Deoxidation Equilibria of Aluminium Containing Steel and Experiments on the Deoxidation in the Electric Furnace: Effect on the Nonmetallic Inclusion Content, by G. Gommellini.
ITALIAN, per, Met Ital., Vol 61, No 7, 1969, pp 295-304.
*HB 7978

The Prevention of the Transversal Cracks in Thick Steel Plates, by Y. Matsushita.
JAPANESE, rpt, Annual Report of the Engineering Research Institute Faculty of Engineering University of Tokyo, Dec 1968, pp 170-175.
*BISI 7896

Study of Atmospheric Corrosion of Metals and Rust-resistant Coatings, 3rd Report, by K. Oma.
JAPANESE, per, Boshoku Gijutsu, Vol 14, No 3, 1965, pp 103-108.
*BISI 7899

Study of Atmospheric Corrosion of Metals and Rust-resistant Coatings, by N. Otani.
JAPANESE, per, Boshoku Gijutsu, Vol 14, No 10, 1965, pp 440-446.
*BISI 7698

Study on the Rust Layer on Atmospheric Corrosion Resistant Low Alloy Steels.
II - Specific Surface Area of Rusts, by N. Masuko, et al.
JAPANESE, per, Boshoku Gijutsu, Vol 17, No 12, 1968, pp 539-542.
*BISI 7852

High-top Pressure Blast Operation. Analysis of Muroran No 3 Blast Furnace Operating Data, by T. Yamada.
JAPANESE, per, Fuji Steel Techn Rep, Vol 15, No 2, 1966, pp 99-108.
*BISI 7639

Effect of Various Types of Iron Powder on the Properties of High-Density Iron-Based Sintered Alloys, by Y. Takeya, et al.
JAPANESE, per, Journal of the Japan Society of Powder and Powder Metallurgy, Vol 16, No 3, 1969, pp 134-139.
HB 7940

An Electronic Tensile Testing Machine for Automatic Control of Strain Rate Between the Gauge Marks at Elevated Temperatures, by T. Matsuba, et al.
JAPANESE, per, J. Soc. Mat. Sci. Japan, Vol 18, No 3, 1969, pp 215-220.
*BISI 7854

Fatigue Strength of 18-8 Stainless Steel Soaked in Seawater, by S. Ohte, et al.
JAPANESE, per, J. Soc. Mat. Sci. Japan, Vol 18, No 5, 1969, pp 418-423.
BISI 7754

Changes of Residual Stress Due to Rolling Contact, by H. Muro.
JAPANESE, per, Journal Soc Mat Sci Japan, Vol 18, July 1969, pp 615-619.
*BISI 7806

The Surface Structure of Vapor Deposited Raney Nickel Film and Its Catalytic Activity, by I. Nakabayashi. 11 pp.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 90, No 4, 1969, pp 344-347.
NASA TT F-12,628

Heat Resistance at Mould-Ingot Interface, by Y. Nishida, S. Suzuki.
JAPANESE, per, Nippon Kinzoku, Vol 32, No 9, 1968, pp 882-886.
BISI 7371

On the High Temperature Strength of Ausformed Tool Steel Containing 9%W-2.5%Cr, by H. Takei, et al.
JAPANESE, per, Nippon Kinzoku, Vol 32, No 12, 1968, pp 1270-1275.
BISI 7689

Transmission Electron Microscope Observations of ω Phase in Titanium - 5% Iron Alloy, by F. Ohno.
JAPANESE, per, Nippon Kinzoku, Vol 33, No 4, 1969, pp 437-442.
*BISI 7855

Relationship Between Stress Corrosion Cracking and Crystallographic Orientation in 18-8 Stainless Steel, Part 2 of 'A Basic Study of Stress Corrosion Cracking', by N. Ohtani, T. Iba.
JAPANESE, per, Nippon Kinzoku Gakkai-shi, Vol 33, No 7, 1969, pp 781-785.
HB 7941

"Altight" Aluminized Steel Sheet, by K. Toki.
JAPANESE, per, Nippon Kokan Techn Rep, May 1963, pp 101-110.
*BISI 7900

Study of Directional Silicon Steel Sheet. I - Effect of Impurities on Secondary Recrystallization of Silicon Steel Sheet, by T. Matsuoka.
JAPANESE, per, Tetsu to Hagane, Vol 52, No 10, 1966, pp 1635-1638.
*BISI 7905

Lattice Defects Produced by Working of Low-carbon Steel and Their Annihilation Processes, by Takamura.
JAPANESE, per, Tetsu to Hagane, Vol 52, No 11, 1966, pp 149-152.
*BISI 7904

The Effects of Wet Grinding on the Pelletization of Fine Ores, by Y. Tada, et al.
JAPANESE, per, Tetsu to Hagane, Vol 53, No 3, 1967, pp 188-191.
HB 7972

On the Rate of Absorption of Nitrogen by Liquid Iron and Iron Alloys Containing Carbon, Silicon, Manganese and Chromium, by T. Choh, M. Inouye.
JAPANESE, per, Tetsu-to-Hagane, Vol 53, No 10, 1967, pp 1393-1406.
BISI 6566

A Mathematical Model of a Sintering Furnace, by J. Niguchi, I. Muchi.
JAPANESE, per, Tetsu-to-Hagane, Vol 53, No 11, 1967, pp 1171-1173.
BISI 6299

On the Role of Fine Ore Particles in Haematite Bonding of Pellets, by M. Sasaki, et al.
JAPANESE, per, Tetsu-to-Hagane, Vol 53, No 12, 1967, pp 1561-1568.
BISI 6576

Study of the Properties of Calcium Ferrites in the $\text{CaO-FeO-Fe}_2\text{O}_3$ Ternary System, by M. Asada.
JAPANESE, per, Tetsu-to-Hagane, Vol 54, No 1, 1968, pp 14-19.
BISI 6579

Formation of Calcium Ferrite in Sintered Iron Ores, by M. Sasaki, T. Nakazawa.
JAPANESE, per, Tetsu to Hagane, Vol 54, No 12, 1968, pp 1217-1225.
HB 7925

On the Matrix in Self-fluxing Sinter, by S. Watanabe.
JAPANESE, per, Tetsu to Hagane, Vol 45, 1969, pp 913-915.
*BISI 7879

Solubility of Nitrogen in Liquid Stainless Steel, by T. Takei.
JAPANESE, per, Tetsu to Hagane, Vol 46, Sept 1969, pp 1299-1301.
*BISI 7878

Determination of Mn, Cu, Ni, Cr, Mo, V, Ti and Al in Steel by Atomic Spectrophotometry, by Y. Endo.
JAPANESE, per, Tetsu to Hagane, Vol 55, Feb 1969, p 216.
*BISI 7885

The Necessity for Systematic Management Control, by M. Yamaki.
JAPANESE, per, Tetsu-to-Hagane, Vol 55, No 5, 1969, pp 345-346.
BISI 7590

Thermal Convection During Freezing of Killed Steel, by T. Miyagawa.
JAPANESE, per, Tetsu to Hagane, Vol 55, No 11, 1969, pp 338-341.
*BISI 7890

Study of Boron Hardening Technique. 25 pp.
JAPANESE, rpt, IR 2253054660.
ACSI-J-7500
FSTC-HT-23-366-70

Production of Hydrogen Cyanide by the Formamide Method From Carbon Monoxide and Ammonia.
i - Preparation of Methyl Gormate, by T. Hatano
JAPANESE, per, Tokyo Kogyo Shikensho Hokoku, Vol 51, No 4, 1956, pp 133-138.
*BISI 7853

Investigations of Dust and Sulphur Dioxide Emission Into the Air From Various Departments of Steelworks, by U. Krause, J. Wasilewska.
POLISH, per, Hutnik, Vol 36, No 3, 1969, pp 128-132.
BISI 7629

Glass Lasers as Optical Generators, by P. Schleifer, M. Borczuch. 8 pp.
POLISH, per, Szklo i Ceramika, No 1, 1968, pp 1-3.
AIR/FTD/HT-23-101-69

Injection of Coal into a Blast Furnace, by V. F. Campos, et al.
PORTUGUESE, per, Met. ABM, Vol 20, No 7, 1964, pp 397-402.
BISI 7019

Achievements, Prospects of Metallurgical Research Given, by I. Dragan, 7 pp.
RUMANIAN, per, Metalurgia, Bucharest, Vol 21, No 8, Aug 1969, pp 366-369.
JPRS 49401

Results, Prospects of Rolling Mill Planning Given, by P. Wechsler, 16 pp.
RUMANIAN, per, Metalurgia, Bucharest, Vol 21, No 8, Aug 1969, pp 375-386.
JPRS 49401

Results, Prospects of Coke Production Studied, by I. Stofanescu, I. Barbu, 5 pp.
RUMANIAN, per, Metalurgia, Bucharest, Vol 21, No 8, Aug 1969, pp 387-390.
JPRS 49401

Progress in Field of Cast Iron Production Described, by C. Avram, D. Dobrovici, 8 pp.
RUMANIAN, per, Metalurgia, Bucharest, Vol 21, No 8, Aug 1969, pp 391-394.
JPRS 49401

Development of Steel Production Discussed, by G. Ilin, 6 pp.
RUMANIAN, per, Metalurgia, Bucharest, Vol 21, No 8, Aug 1969, pp 395-397.
JPRS 49401

1944-1969 Production of Rolled Steel Given,
by I. G. Pope, 8 pp.
RUMANIAN, per, Metalurgia, Bucharest, Vol 21,
No 8, Aug 1969, pp 398-401.
JPRS 49401

1950-1969 Production of Steel Pipe Described,
by I. Moldovan, A. Cicina, 6 pp.
RUMANIAN, per, Metalurgia, Bucharest, Vol 21,
No 8, Aug 1969, pp 402-405.
JPRS 49401

Development of Metal Casting Traced, by
Cl. Stefanescu, 8 pp.
RUMANIAN, per, Metalurgia, Bucharest, Vol 21,
No 8, Aug 1969, pp 406-410.
JPRS 49401

Achievements, Prospects in Area of Refractory
Materials Given, by G. Gheorghiu,
L. Sorocopud, 6 pp.
RUMANIAN, per, Metalurgia, Bucharest, Vol 21,
No 8, Aug 1969, pp 417-420.
JPRS 49401

Development of Petroleum Processing, by
Gh. C. Suciu, 7 pp.
RUMANIAN, per, Revista de Chimie, Bucharest,
1969, pp 469-472.
JPRS 49450

Development of Nonferrous Metals Industry,
by I. V. Buda, 11 pp.
RUMANIAN, per, Revista de Chimie, Bucharest,
Aug 1969, pp 484-489.
JPRS 49450

Studies on the Kinetics of the Vacuum Degassing
of Molten Iron and Steel, by J. Calvo Gomez
SPANISH, per, Rev. Mat. CENIM, Vol 5, No 6,
1969, pp 276-289.
BISI 7688

Tables of Atomic Wave Functions, by V. F. Brattsev,
72 pp.
RUSSIAN, rpt, Akad Nauk SSSR, Math. Institute,
1966.
AEC/LA-Tr-4106

Arrangement of Maximum Deviation Points in
Chebyshev's Approximation of Continuous
Functions, by V. G. Verdiyev.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol 186, No 4,
1969, pp 747-749.
*Dept of Navy APL/JHU J-1436

Optimum Forms of Space Triangulation Figures,
by B. M. Klentskiy, 15 pp.
RUSSIAN, per, Gaodeziya i Kartografiya,
Moscow, Jan 1968, pp 7-18.
JPRS 49432

On the Simultaneous Approximation of Functions
and Their Derivatives, by Ye. A. Bredikhina.
RUSSIAN, per, Izv Ak Nauk SSSR, Ser Mat, Vol
28, No 4, 1964, pp 757-772.
Dept of Navy APL/JHU CIB-3 T-595

Smoothness of Solutions of Degenerating Elliptic
Equations, by M. I. Freidlin.
RUSSIAN, per, Izv Ak Nauk SSSR, Ser Mat, Vol 32,
No 6, 1968, pp 1391-1413.
Dept of Navy APL/JHU CIB-3 T-604

Approximation of Continuous Periodic Functions
of Two Variables by Trigonometric Polynomials,
by G. P. Gubanov.
RUSSIAN, per, Izv VUZ Mat, No 5, 1969, pp 84-98.
*Dept of Navy APL/JHU J-1437

Numerical Method of Solving Two-Dimensional and
Three-Dimensional Diffusion Equations, by
N. I. Buleyev, 17 pp.
RUSSIAN, per, Mat Sbornik, Vol 51, 1960, pp 227-381.
AEC/NP-Tr01770

On Representation of Functions by Orthogonal
Series, by R. I. Osipov.
RUSSIAN, per, Matematicheskii Sbornik, Vol 68,
No 4, 1965, pp 487-497.
Dept of Navy APL/JHU CIB-3 T-613

Uniqueness Classes of the Solution of the
Boundary-value Problem in an Infinite Layer
for Systems of Linear Partial Differential
Equations with Constant Coefficients, by
V. M. Borok.
RUSSIAN, per, Math Sbornik, No 2, 1969,
pp 293-304.
Dept of Navy APL/JHU T-2357

Principles of Statistical Work and Charting of Oceanographic Data, by I.S. Koplan-Diks 128 pp.

RUSSIAN, mono, Osnovy statisticheskoi obrabotki i kartirovaniya okeanograficheskikh dannyykh, 1968

*CFSTI TT 70-50057

Investigation of Nonlinear Oscillations With the Aid of Lyapunov Functions, by G. V. Kamenkov. 48 pp.

RUSSIAN, per, Trudy Moscow. Universitet Druzhby Narodov, Vol 15, No 3, 1966, pp 3-55.

AIR/FTD/HT-23-177-69

A Method of Mappings for Solving External Problems with Constraints, by Ye. Raik.

ESTONIAN, per, Eesti NSV Tead. Akad. Toimetised. Fuus-Mat, Vol 17, 1968, pp 255-259.

*NASA TT F-12,805

Difference Equations and Markov Chains, by V. P. Gatun, A. V. Skorskod.

UKRAINIAN, per, Ukr Mat Zh, Vol 21, No 3, 1969, pp 305-315.

Dept of Navy APL/JHU T-2348

Satellite Triangulation, by M. Solaric.

CZECH, per, Geodetski List, Vol 23, No 1-2, 1969, pp 11-20.

*ACIC-TC-1604

Determination of Geocentric Angular Coordinates, by H. Rehse.

GERMAN, per, Vermessungstechnik, Vol 17, No 5, 1969, pp 17-14. No 6, 1969, pp 220-222.

*ACIC-TC-1603

Approximation of Functions of One or Several Variables, by L. Collatz.

GERMAN, per, Zeit Angew Math Mech, Vol 36, No 5-6, 1956, pp 198-211.

CEGB/C.E. Trans 5124

Engineer Support of River Crossings, by I. F. Lysukhin, 189 pp.

RUSSIAN, bk, 1968.

ARM/FSTC/HT-23-199-69

Standardizing Documents, State Construction Standards, 6 pp.

RUSSIAN, per, Byulleten' Stroitel'noy Tekhniki, Moscow, No 9, 1969, pp 14-15.

JPRS 49504

Industrialization of Rural Construction in Kazakhstan, by V. N. Merzlyakov, 5 pp.

RUSSIAN, per, Byulleten' Stroitel'noy Tekhniki, Moscow, No 9, 1969, pp 43-44.

JPRS 49504

Diffusion Welding in a Vacuum, by

N. F. Kazakov. 394 pp.

RUSSIAN, bk, Diffuzionnaya Svarka v Vakume, 1968, pp 1-332.

AIR/FTD/MT-24-419-68

Dynamics of a Machine for Fatigue Testing, by S. V. Seresen, M. S. Garf, et al.

RUSSIAN, bk, Dinamika Mashin dlia isputanii na ustalost, 1967

*CFSTI TT 70-50033

Increasing Operational Reliability of Grid Steam Superheater, by A. V. Bugasov, Ye. F. Shevchenko, 5 pp.

RUSSIAN, per, Energetik, Moscow, No 11, 1969, pp 12-13.

JPRS 49543

Use of Salinometers with Degasification, Enrichment, by I. T. Sychev, G. K. Drobot, 7 pp.

RUSSIAN, per, Energetik, Moscow, No 11, 1969, pp 13-14.

JPRS 49543

Water Hammer and Surge Tanks, by G. V. Aronovich, et al, 247 pp.

RUSSIAN, mono, Gidravlicheskiy udar i uravnitel'nye rezervuary, 1968

*CFSTI TT 70-50025

Studies on the Theory of Structures, (Collection of Articles) 290 pp.

RUSSIAN, bk, Issledovaniya po Teorii Sooruzheniy. Sbornik Statey, No 15, 1965, pp 1-266.

AIR/FTD/HT-23-939-68

Scientific
Mechanical, Industrial, Civil &
Marine Engineering (Contd)

Scientific
Mechanical, Industrial, Civil &
Marine Engineering (Contd)

Approximate Determination of Stresses in a Rectangular Orthotropic Plate of Finite Dimensions During Symmetrical Compression by an Intermittent Load, by V. F. Bondin. 10 pp.
RUSSIAN, per, Izvestiya VUZ. Stroitel'stvo i Arkhitektura, No 4, 1962, pp 44-52.
AIR/FTD/HT-23-403-69

How Best to Improve Machines Making Synthetic Fibers, by A. P. Kovalenko, 5 pp.
RUSSIAN, per, Khimicheskiye Volokna, Moscow, No 5, 1969, pp 63-65.
JPRS 49528

Refrigeration Engineering and Technology.
RUSSIAN, per, Kholodil'naya Tekhnika Tekhnologiya, 1967, pp 102-105.
*ACSI-J-7825
*FSTC-HT-23-413-70

Effect of Die Deformation on the Normal Stress Distribution at the Contact Surface During the Pressing of Thin Bodies, by P. F. Ivanushkin, V. I. Doroshko. 11 pp.
RUSSIAN, per, Kuznechno-Shtampovchnoye Proizvodstvo, No 5, 1967, pp 16-20.
AIR/FTD/MT-24-139-69

Grinding at the Present-Day Stage, by G. B. Lur'ye. 17 pp.
RUSSIAN, per, Mashinostroitel', No 11, 1967, pp 28-31.
AIR/FTD/MT-24-140-69

Methods of Electrical Modelling of the Hydraulic Sections of Air Cooling Systems of Gas Turbines with the Aid of Series Integrators, by L. A. Kozdoba, A. F. Moshnyanskiy, 18 pp.
RUSSIAN, per, Mashinostroyeniye, No 4, 1967, pp 39-50
ARM/FSTC/HT-23-705-69

The 43rd Voyage of "Vityaz" in the Central Pacific, by P. L. Bezrukov. 11 pp.
RUSSIAN, per, Okeanologiya, No 1, 1969, pp 193-199.
ACSI-J-6952
ID 2204004669

Designing Rockfill and Rock-Earth Dams, by R. A. Arapetian, 295 pp.
RUSSIAN, mono, Proektirovanie Kamennonaprosnykh i Kamennozemlianykh plotin, 1968
*CFSTI TT 70-50024

Thermal Buckling of Plates and Curved Shells in Supersonic Gas Flow, by V. V. Bolotin, 40 pp.
RUSSIAN, per, Raschety na Prochnost', Moscow, No 6, 1960, pp 190-216.
JPRS 49331

Operating Range of Hydroacoustic Fish Locators, by K. I. Yudanov. 6 pp.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 8, 1969, pp 38-41.
Dept of Inter
BCF/OFF
A-33/Nov 69/53
On Loan Only

Sea Tests of the Trawler Catamaran Eksperiment, by I. M. Semenov.
RUSSIAN, per, Rybno Khoz, Vol 45, No 11, 1969, pp 24-26.
*Dept of Inter
BCF/OFF
*CFSTI TT 69-59000/11

Pneumatic Suction Device for Unloading Catches, RUSSIAN, per, Rybnoe Khoz, Vol 45, No 11, 1969, pp 27-28.
*Dept of Inter
BCF/OFF
*CFSTI TT 69-59000/11

Determining the Dropping Speed of the Bottom Line of a Purse Seine, by V. A. Vasilenko.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 11, 1969, pp 35-36.
*Dept of Interior
BDF/OFF
*CFSTI TT 69-59000/11

The 50.8-meter Trawl, by V. M. Burkov.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 11, 1969, pp 37-39.
*Dept of Inter
BCF/OFF
*CFSTI TT 69-59000/11

Mackerel Purse Seining in Northwestern Pacific, by Yu. P. Smirnov.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 11, 1969, pp 40-42.
*Dept of Inter
BCF/OFF
*CFSTI TT 69-59000/11

Scientific
Mechanical, Industrial, Civil &
Marine Engineering (Contd)

Scientific
Mechanical, Industrial, Civil &
Marine Engineering (Contd)

The 50-meter Midwater Trawl, by I. Shushukov.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 11, 1969,
pp 42-44.
*Dept of Inter
BCF/OFF
*CFSTI TT 69-59000/11

Experimental Basis for the Relative Catch
Efficiency of Gill Nets, by Yu. T. Sechin.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 11,
1969, pp 48-49.
*Dept of Inter
BCF/OFF
*CFSTI TT 69-59000/11

Extreme Values of Constant Catch with Respect
to Weight Ratio and Fishing Effort, by
I. B. Bukhanevich.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 11, 1969,
pp 51-53.
*CFSTI TT 69-59000/11
*Dept of Inter
BCF/OFF

The Assembly and Welding of Hydrofoils, by
N. I. Lopatin, I. V. Shlyapnikov. 131 pp.
RUSSIAN, bk, Sbornik i Svarka Sudov na Podvod-
nykh Kryl'yakh, 1967.
Dept of Navy NIC Tran 2943

Determining Residual Stress in Welded Metal
Samples, by R. M. Aronov, V. S. Zoteyev. 10 pp.
RUSSIAN, per, Sbornik Trudov Moscow. Tsentral'nyy
Nauchno-Issledovatel'skiy Institut Chernoy
Metallurgii, No 48, 1967, pp 165-170.
AIR/FTD/HT-23-1146-68

Prototype Tanker Mangyshlak Described, by
S. M. Sterkin, M. S. Tranpeznikov, 6 pp.
RUSSIAN, per, Sudostroyeniye, Leningrad, No 9,
Sept 1969, pp 3-6.
JPRS 49488

New Dry-Cargo Ship Successfully Tested, by
V. M. Vanurin, S. A. Nikitenkov, 8 pp.
RUSSIAN, per, Sudostroyeniye, Leningrad, No 10,
1969, pp 6-9.
JPRS 49504

On-sided Automatic Welding of High-Strength Steels
in a Carbon Dioxide Medium, by I. A. Gedovius,
V. I. Nikonov, et al. 7 pp.
RUSSIAN, rpt, Svarka Novykh Vysokoprochnykh
Materialov, 1967, pp 7-13.
AIR/FTD/HT-23-01-69

Methods of Preventing Cracks in Joints Welded
in Steel 25KhGSA, by I. A. Gedovius. 9 pp.
RUSSIAN, rpt, Svarka Novykh Vysokoprochnykh
Materialov, 1967, pp 14-20.
AIR/FTD/HT-23-01-69

Automatic Welding of High-Strength Steels With
Transverse Vibrations of the Electrode, by
D. N. Ganelin, S. P. Yevseyev, et al. 7 pp.
RUSSIAN, rpt, Svarka Novykh Vysokoprochnykh
Materialov, 1967, pp 21-26.
AIR/FTD/HT-23-01-69

Reclaiming Dies by the Facing Method, by
F. N. Ganelin, P. S. Kubrakov, et al. 7 pp.
RUSSIAN, rpt, Svarka Novykh Vysokoprochnykh
Materialov, 1967, pp 27-33.
AIR/FTD/HT-23-01-69

High-Frequency-Arc Welding of High-Strength
Sheet Steels, by N. V. Vsenko, S. V. Utkin. 9pp
RUSSIAN, rpt, Svarka Novykh Vysokoprochnykh
Materialov, 1967, pp 34-42.
AIR/FTD/HT-23-01-69

Experience With Projection Welding of Ball-
Bearing Retainers, by M. D. Rudman. 10 pp.
RUSSIAN, rpt, Svarka Novykh Vysokoprochnykh
Materialov, 1967, pp 43-52.
AIR/FTD/HT-23-01-69

Automatic Welding of Special Steel and Alloy
Valves Assemblies, by N. I. Yevdokimov,
V. A. Deryagin, et al. 6 pp.
RUSSIAN, rpt, Svarka Novykh Vysokoprochnykh
Materialov, 1967, pp 53-57.
AIR/FTD/HT-23-01-69

Molten-Slag Arcless Electric Remelting of High-
Speed Steels, by M. G. Kozulin, A. O. Syatishev,
et al. 6 pp.
RUSSIAN, rpt, Svarka Novykh Vysokoprochnykh
Materialov, 1967, pp 58-63.
AIR/FTD/HT-23-01-69

Automatic Control of Arc Length in Welding
High-Strength-Steel Products, by D. N. Ganelin,
S. P. Yevsetev, et al. 5 pp.
RUSSIAN, rpt, Svarka Novykh Vysokoprochnykh
Materialov, 1967, pp 64-67.
AIR/FTD/HT-23-01-69

Improvement of Work Organization in the Molten-
Slag Arcless Electric Welding Section, by
A. S. Pisarev. 6 pp.
RUSSIAN, rpt, Svarka Novykh Vysokoprochnykh
Materialov, 1967, pp 68-74.
AIR/FTD/HT-23-01-69

Scientific
Mechanical, Industrial, Civil &
Marine Engineering (Contd)

Properties of Welded Joints in V92 Alloy, by
V. M. Shmakov, Yu. I. Fedotov, et al. 8 pp.
RUSSIAN, rpt, Svarka Novykh Vysokoprochnykh
Materialov, 1967, pp 75-81.
AIR/FTD/HT-23-01-69

Diffusion Welding of Unlike Metals, by
V. M. Shmakov, A. N. Izmirliyeva. 7 pp.
RUSSIAN, rpt, Svarka Novykh Vysokoprochnykh
Materialov, 1967, pp 82-85.
AIR/FTD/HT-23-01-69

Improvement of the Process of Cutting Aluminum
Alloys With a Pinched Arc, by A. P. Matveyev.
5 pp.
RUSSIAN, rpt, Svarka Novykh Vysokoprochnykh
Materialov, 1967, pp 86-89.
AIR/FTD/HT-23-01-69

Brazing of Titanium-Alloy Structures With
Thermovacuum Coatings, by B. N. Perevezantsev,
A. V. Shavkunov, et al. 7 pp.
RUSSIAN, rpt, Svarka Novykh Vysokoprochnykh
Materialov, 1967, pp 90-96.
AIR/FTD/HT-23-01-69

Argon-Shielded Welding of Aluminium Alloys With
a Three-Phase Arc, by V. I. Stolbov,
I. G. Moiseyenko. 5 pp.
RUSSIAN, rpt, Svarka Novykh Vysokoprochnykh
Materialov, 1967, pp 97-100.
AIR/FTD/HT-23-01-69

Means of Increasing Precision in Structures
Welded from AMg6 Alloy, by V. P. Moiseyenko. 5 pp.
RUSSIAN, rpt, Svarka Novykh Vysokoprochnykh
Materialov, 1967, pp 101-104.
AIR/FTD/HT-23-01-69

Welding in Controlled-Atmosphere Chambers With
Repeated use of the Shielding Gas, by
Yu. V. Kazakov, N. A. Aksenov. 6 pp.
RUSSIAN, rpt, Svarka Novykh Vysokoprochnykh
Materialov, 1967, pp 105-111.
AIR/FTD/HT-23-01-69

Equipment for Electrolytic Polishing and Quality
Control of Wire Conditioning Prior to Welding,
by A. M. Boldyrev, G. D. Nikiforov, et al. 6 pp.
RUSSIAN, rpt, Svarka Novykh Vysokoprochnykh
Materialov, 1967, pp 112-116.
AIR/FTD/HT-23-01-69

Television Monitoring of Shielded-Arc Welding,
by Ch. G. Postamak. 7 pp.
RUSSIAN, rpt, Svarka Novykh Vysokoprochnykh
Materialov, 1967, pp 121-128.
AIR/FTD/HT-23-01-69

Scientific
Mechanical, Industrial, Civil &
Marine Engineering (Contd)

Welding Engineering, by G. L. Petrov, L. F. Rylov.
15 pp.
RUSSIAN, per, Transactions of the M. I. Kalinin
Leningrad Polytechnical Institute, No 245,
1965, pp 66-76.
NAV/NIC/Tran-2948-69

Calculating Noise Reduction in Large-Diameter
Lined Ducts, by F. Ye. Grigor'yan, 12 pp.
RUSSIAN, per, Trudy Tsentral'nogo Nauchno-
issledovatel'skogo Instituta Morskogo Flota,
Uluchsheniye Usloviy Truda na Morskom Flote,
Leningrad, No 101, 1968, pp 61-71.
JPRS 49472

Calculating Self-Exciting Gas Dynamic
Oscillations in Heat Exchanger Gaslines, by
V. I. Zinchenko, 12 pp.
RUSSIAN, per, Trudy Tsentral'nogo Nauchno-
issledovatel'skogo Instituta Morskogo Flota,
Uluchsheniye Usloviy Truda na Morskom Flote,
Leningrad, No 101, 1968, pp 72-83.
JPRS 49472

Noise Reduction in Ship Air-Conditioning
Systems, by A. G. Yel'nik, 15 pp.
RUSSIAN, per, Trudy Tsentral'nogo Nauchno-
issledovatel'skogo Instituta Morskogo Flota,
Uluchsheniye Usloviy Truda na Morskom Flote,
Leningrad, No 101, 1968, pp 83-96.
JPRS 49472

Selective Analysis of Noise from a Complex
Source, by F. Ye. Grigor'yan, 6 pp.
RUSSIAN, per, Trudy Tsentral'nogo Nauchno-
issledovatel'skogo Instituta Morskogo Flota,
Uluchsheniye Usloviy Truda na Morskom Flote,
Leningrad, No 101, 1968, pp 104-108.
JPRS 49472

Mutual Spectra Methods, by V. I. Loshakov,
8 pp.
RUSSIAN, per, Trudy Tsentral'nogo Nauchno-
issledovatel'skogo Instituta Morskogo Flota,
Uluchsheniye Usloviy Truda na Morskom Flote,
Leningrad, No 101, 1968, pp 96-103.
JPRS 49472

Development of Cement Industry Quarries, by
A. L. Kunitsyn, 5 pp.
RUSSIAN, per, Tsement, Moscow, No 9, 1969, pp 3-4.
JPRS 49515

Scientific
Mechanical, Industrial, Civil &
Marine Engineering (Contd)

Vacuum Deposition of Thin Films, by
B. S. Denilin. 321 pp.
RUSSIAN, bk, Vakuumnye Naneseniye Tonkikh
Plenok, 1967, pp 1-312.
AIR/FTD/MT-24-490-68

Statistics on Interkolhoz Organization, 11 pp.
RUSSIAN, per, Vestnik Statistiki, Moscow, No 9,
1969, pp 88-92.
JPRS 49504

Construction Progress at Izhevsk Motor Plant,
by N. Semina, 5 pp.
RUSSIAN, per, Za Rulem, Moscow, Nov 1969,
pp 4-5.
JPRS 49398

Ineffective Use of Gondola Fleet Analyzed,
by S. L. A'terman, A. I. Smetanin, 11 pp.
RUSSIAN, per, Zheleznodorozhnyy Transport,
Moscow, Oct 1969, pp 13-18.
JPRS 49476

Mechanical Time Fuze, by N. P. Novikov.
RUSSIAN, Patent 163,506.
*ACSI-J-7834
*FSTC-HT-23-291-70

Electromagnetic Friction Clutch, by
V. S. Rybakov, R. N. Kovalev, et al. 3 pp.
RUSSIAN, Patent No. 187,877, 18 Dec 1964, 1966,
pp 1-2
AIR/FTD/HT-23-1403-68

Wave-Type Friction Transmission, by
A. I. Goncharenko. 3 pp.
RUSSIAN, Patent No. 188,811, 22 Jul 65, 1966,
pp 1-2.
AIR/FTD/HT-23-1400-68

Flaw Detection Device for Gas Turbine Blades, by
A. P. Yevtikhiyev. 3 pp.
RUSSIAN, Patent No. 198,775, 3 May 1966, 1967,
pp 1-2.
AIR/FTD/HT-23-1396-68

Device for Measuring Axial Forces, by
A. G. Vygonnyy. 3 pp.
RUSSIAN, Patent No. 209,809, 6 Sept 1965, 1968
pp 1-2.
AIR/FTD/HT-23-1394-68

Scientific
Mechanical, Industrial, Civil &
Marine Engineering (Contd)

State of the Contemporary Coastal Fishing
Fleet and Types of Coastal Fishing Boats,
by Dunev. 6 pp.
BULGARIAN, per, Rybno Stopanstvo, Vol 16,
No 1, 1969, pp 15-16.
Dept of Inter
BCF/OFF
A-33/Nov 69/30
On Loan Only

Automation in Czechoslovak and Foreign Forges,
by A. Jicha.
CZECH, per, Hutnik, Vol 19, No 7, 1969,
pp 269-274.
*BISI 7828

Production of Helically Welded Tubes of CSN
11432 Semi-killed Steel, by Z. Hamza.
CZECH, per, Zvaranie, Vol 18, No 2, 1968,
pp 40-43.
*BISI 7861

Determination of the Time Maximum Pressure in a
Gun from the Measurement Results of the 6-cc
Gas-pressure Measuring Apparatus. 5 pp.
DUTCH, rpt, Bepaling van de Ware Maximum Druk
in Eenkanon Uit Het Meetresultaat Van Het
Gasdrukmeettoestel 6-cc.
ACSI-J-7586
FSTC-HT-23-287-70

Hassi Messaoud Oil Concessions Progressing,
7 pp.
FRENCH, per, SN REPAL Bulletin d'Information,
Algiers, No 149, 1 Oct 1969, 8 pp.
JPRS 49452

A Contribution to the Calculation of Rotating
Shells, by K. Hennig. 12 pp.
GERMAN, per, Akademie der Wissenschaften zu
Berlin. Monatsberichte, Vol 9, No 6, 1967,
pp 418-427.
AIR/FTD/HT-23-1187-68

Cold-storage of Salt-water Fish, by
U. Kietzmann. 29 pp.
GERMAN, per, Archiv fur Lebensmittelhygiene,
Vol 19, 1968, pp 238-244.
Dept of Inter
BCF/OFF
A-33/Nov 69/104
On Loan Only

Scientific
Mechanical, Industrial, Civil &
Marine Engineering (Contd)

Lay-out of Hydraulic Descaling Plant, by
W. Herold.
GERMAN, per, Bander Bleche, No 5, Vol 10,
1969, pp 279-288.
*BISI 7892

Experience Gained in the Construction and Opera-
tion of the Mullerstrasse and Theresienstrasse
Power and Heat Supply Stations, by F. Ammann.
GERMAN, per, Energie, Vol 11, July 1959,
pp 318-324.
CEGB/C.E. Trans 5201

Shaft Hoisting Equipment for a Tunnel Construction
Project, by Rudolf Gronebaum, 9 pp.
GERMAN, per, Foerdm Heben, Vol 16, No 19, 1966,
pp 782-784.
AEC/ORNL-Tr-3030-69

Newly Developed Equipment Shown at the Leipzig
Spring Fair 1969, by H. Priemer.
GERMAN, per, Hebezeuge und Foerdmittel,
Vol 9, No 8, 1969, pp 225-233.
*ACSI-J-7812
FSTC-HT-23-488-70

Rapid Expansion of Soviet Auto Industry
Described, by V. M. Petrov, 5 pp.
GERMAN, np, Internationale Wirtschaft,
Vienna, 7 Nov 1969.
JPRS 49528

Robur Works Develops New Specialized Vehicles,
by H. Morche, 6 pp.
GERMAN, per, Kraftfahrzeugtechnik, East Berlin,
Sept 1969, pp 258-259.
JPRS 49486

Examination of High Duty Boiler Drums, by
K. Kussmaul.
GERMAN, per, Mitt VGB, Vol 49, Apr 1969,
pp 113-122.
CEGB/C.E. Trans 5246

The Conical Breaking Pot as a Mechanical Over-
load Safety Device in Rolling Stand Construction,
by F. Leistner.
GERMAN, per, Neue Hutte, Vol 14, Apr 1969,
pp 223-228.
*BISI 7817

Scientific
Mechanical, Industrial, Civil &
Marine Engineering (Contd)

Details of V-300 Diesel Locomotive Provided, by
Carl Schwerin, 9 pp.
GERMAN, per, Schienenfahrzeuge, East Berlin,
Sept 1969, pp 293-295.
JPRS 49380

Repair of Railway Wheel Rims by Inert-gas
Welding, by M. Becker.
GERMAN, per, Schweissen und Schneiden, Vol 10,
No 11, 1958, pp 442-444.
*BISI 7866

Dressing Shops in Light Section Mills, by
M. Weidemann.
GERMAN, per, Stahl Eisen, Vol 79, Apr 1959,
pp 543-545.
*BISI 7895

Optimum Design of a By-pass Engine with Flow
Mixing, by A. Hartman.
GERMAN, rpt, Wissenschaftliche Gesellschaft
fur Luft- und Raumfahrt, and Deutsche Gesell-
schaft fur Raketentechnik und Raumfahrtforschung,
Jahrestagung, Sept 1964, pp 353-361.
*NASA TT F-12,843

Rostock-Berlin Railroad Line Structures Described,
by F. Illner, 8 pp.
GERMAN, per, Zeitschrift der Organisation fuer die
Zusammenarbeit der Eisenbahnen--OSShd, Warsaw,
No 3, 1969, pp 29-32.
JPRS 49380

Production and Corrosion Protection of Bearings
Part 2. Examination of Corrosion Inhibitors, by
I. Kincses, T. Szalay, et al. 11 pp.
HUNGARIAN, per, GEP, No 6, 1968, pp 231-234.
AIR/FTD/HT-23-144-69

Transient Resp. of d.c. Motor Drives with
Automatic Speed Control, by G. Montessori.
ITALIAN, per, Automazione e Strumentazione,
Vol 16, No 2, 1968, pp 56-70.
*Dept of Navy APL/JHU J-1431

An Investigation of the Sintering Machine Tube
Enlarged and Modernized, by K. Ueshima.
JAPANESE, per, Tetsu to Hagane, July 1968,
pp 817-836.
*BISI 7860

Scientific
Mechanical, Industrial, Civil &
Marine Engineering (Contd)

Marine Accidents in the Fishing Fleet. Part I-Average Damage, by I. Bulski. 9 pp.
POLISH, per, Biuletyn Zjednoczenia Gospodarki Rybnej, Vol 5, No 4(47), 1968, pp 67-72.
Dept of Inter
BCF/OFF
A-33/Nov 69/84
On Loan Only

Notes on Measuring Nonstationary Pressures Behind the Rotor, by A. Zabicki. 6 pp.
POLISH, per, Lodz. Politechnika. Katedra Cieplnych Maszyn Przeplywowych. Ciopline Maszyny Przeplywowe, No 63, 1967, pp 289-292.
AIR/FTD/HT-23-1326-68

The Most Common Hazards, Defects and Damages to Containers During Transportation and Storage in India. 21 pp.
POLISH, per, Opakowanie, No 5, 1967, ppl-6.
ACSI-J-6507
FSTC-HT-23-172-69

Development of Shipbuilding Described, by George Constantin, 14 pp.
ROMANIAN, per, Constructia de Masini, Bucharest, Aug-Sept 1969, pp 497-504.
JPRS 49496

Production of Farm Machinery Reviewed, by M. Calotita, 6 pp.
ROMANIAN, per, Constructia de Masini, Bucharest, Aug-Sept 1969, pp 507-513.
JPRS 49496

Achievements of Optical Industry Reported, by L. Iliescu, V. Ionescu, 9 pp.
ROMANIAN, per, Constructia de Masini, Bucharest, Aug-Sept 1969, pp 524-532.
JPRS 49496

Development of Iron, Steel Industry Discussed, 5 pp.
ROMANIAN, per, Metalurgia, Bucharest, Vol 21, No 8, Aug 1969, pp 363-365.
JPRS 49401

Railroad, Highway, Waterway Development Described, by Mirko Dokic, 32 pp.
SERBO-CROATIAN, per, Zelesnice, Belgrade, Oct 1969, pp 18-31.
JPRS 49391

Scientific
Mechanical, Industrial, Civil &
Marine Engineering (Contd)

Development of Wood-Processing Industry Urged, 9 pp.
VIETNAMESE, per, Ky Thuat Cong Nghiep Nhe, Hanoi, No 4, Sept 1969, pp 13-17.
JPRS 49527

Methods & Equipment

Use of Aerial Methods in Landscape Studies, by S. V. Viktorov, 403 pp.
RUSSIAN, bk, 1959.
ARM/FSTC/INT-23-1101-68

Holography and Cine-holography of Rapidly Occurring Processes, by A. N. Zaidel. 10 pp.
RUSSIAN, rpt, High-speed Plot; Proc of the 8th Intern Congr (Stockholm), 23-29 Jun 1968, pp 309-313.
NASA TT F-12,641

Development of Meteorological Instruments, by M. S. Sternzat, 19 pp.
RUSSIAN, per, Trudy Glavnaya Geofizicheskaya Observatoriya, No 218, 1967, pp 153-166.
ARM/FSTC/HT-23-630-69

A Calculated Analysis of Certain Parameters of a Slant Transparency Meter, by V. A. Markelov, 8 pp.
RUSSIAN, per, Trudy Leningrad. Nauchno-Issledovatel'skiy Institut Gidrometeorologicheskogo Priborostroyeniya, No 18, 1968, pp 81-86.
ARM/FSTC/HT-23-707-69

Apparatus for Measuring Boundary-Layer Parameters of Aerodynamic Profiles, by L. M. Malyshev, I. A. Fokin. 6 pp.
RUSSIAN, Patent No, 204,631, 27 Jun 1966, 1968 pp 1-4.
AIR/FTD/HT-23-1388-68

A Device for Remote Measurements of Wind Parameters, by K. N. Menuylov, A. L. Zlatin, et al. 9 pp.
RUSSIAN, Patent No. 206,924, 2 Jun 1966, 1968, pp 1-4.
AIR/FTD/HT-23-1242-68

Sensitive Gamma Beam Calorimeter, by J. Handl, Z. Kovar, 10 pp.
CZECH, per, Jaderna Energie, Vol 14, No 3, 1968, pp 110-112.
AEC/UCRL-Tr-10399-69

Characteristics of Thermistors when used as Sensing Elements for Measuring Flow Rates of Liquids and Gases, by J. Veprek, 23 pp.
CZECH, per, Slaboproudny Obz, Vol 20, 1959, pp 353-360.
AEC/NP-Tr-1807

Method and Equipment for making Preparations of Microscopic Particles of Solid Substances, by J. Blazek, 10 pp.
CZECH, patent, 118,566, 15 May 1966.
AEC/UCRL-Tr-10396-69

A Mathematical Model for Gastrointestinal-Tract Dosimetry: Application to Adults, by George Vacca, Jean-Pierre Bazin, 56 pp.
FRENCH, rpt, CEA-R-3707.
AEC/ORNL-Tr-2231-69

Studies with the Use of Potential, Probe, and Eddy-current Methods, by J. Kruse.
GERMAN, per, Feingerate-Technik, Vol 18, No 2, 1969, pp 75-78.
*HB 8027

The Accuracy and Reliability of Roughness Measurements, by H. von Weingraber, 43 pp.
GERMAN, rpt, Inst Messtechnik Austauschbau, Technische Hochschule, 1969.
AEC/UCRL-Tr-10398-69

Missile Technology

Correcting Inertial Systems by Using Astronomical Instruments, by L. A. Dmitrochenko. 12 pp.
RUSSIAN, per, Trudy Moscow. Aviatsionny Institut, No 179, 1968, pp 20-29.
AIR/FTD/MT-24-148-69

Hydrodynamic Suspension. Forces and Centering, by A. I. Beklemishchev. 14 pp.
RUSSIAN, per, Trudy Moscow. Aviatsionny Institut No 179, 1968, pp 110-120.
AIR/FTD/MT-24-148-69

Calculation of the Force Characteristics of the External Spherical Suspension Device of a Cryogenic Gyroscope, by A. B. Ryabov. 22 pp.
RUSSIAN, per, Trudy Moscow. Aviatsionny Institut No 179, 1968, pp 120-142.
AIR/FTD/MT-24-148-69

Aeronautical Knowledge, by Hsing Tsung, Min Shu, et al. 13 pp.
CHINESE, per, Hang K'ung Chin Shih, Vol 2, No 6, 1965, pp 31-33.
AIR/FTD/HT-23-648-68

Electronic Guidance of Rockets, by Shih Lei. 6 pp.
CHINESE, per, Kio-hsueh Ta-chung, No 1, 1964, pp 20-22.
ACSI-J-7685
FSTC-HT-23-263-70

Missiles and Antimissile Missiles, by Jan Pietras. 5 pp.
POLISH, np, Zolnierz Wolnosci.
NAV/NIC/Tran-2944-69

Navigation, Communications, Detection & Countermeasures

Some Non-linear Problems in the Antenna Synthesis Theory, by A. G. Ramm.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol 186, No 6, 1969, pp 1277-1280.
*Dept of Navy APL/JHU J-1427

Interference Immunity of Wideband Communication System, by D. D. Naslirson. 10 pp.
RUSSIAN, per, Izv VUZ Radioelektronika, No 2, 1968, pp 115-121.
ACSI-J-7577
FSTC-HT-23-327-70

Synthesis of Passive Antenna Arrays on a Cylinder, by B. M. Petrov.
RUSSIAN, per, Izv VUZ Radioelektronika, Vol 12, No 6, 1969, pp 563-566.
Dept of Navy APL/JHU T-2362

A Method for Relating Satellite Photographs to Locations, by M. Nazirov.
RUSSIAN, per, Met i Gid, No 5, 1969, pp 89-91.
Dept of Navy APL/JHU CLB-3 T-616

Increasing the Accuracy of Radar Measurement of Precipitation, by V. V. Kostarev, A. A. Chernikov.
RUSSIAN, per, Met i Gid, No 7, 1969, pp 102-106.
Dept of Navy APL/JHU CLB-3 T-615

Scientific
Navigation, Communications, Detection
& Countermeasures (Contd)

Propagation of Radio Waves, by G. P. Grudinskaya,
307 pp.
RUSSIAN, bk, Rasprostraneniye Radiovoln, 1967,
pp 1-244.
AIR/FTD/MT-24-382-68

Equipment for Recording Seismic Phenomena,
170 pp.
RUSSIAN, bk, Seismicheskoe Proverye, No. 5
1969
*CFSTI TT 70-50019

Space-time Characteristics of Clear-sky Radar
Returns, by G. B. Bryleyev.
RUSSIAN, per, Trudy Glav Goetiz Obser, No 217,
1967, pp 70-87.
Dept of Navy APL/JHU CLB-3 T-617

An Optical System for Simultaneous Circular
Coverage, by Ye. N. Goncharenko, G. F. Belyakov.
2 pp.
RUSSIAN, Patent No. 215,549, 5 Jan 1967, 1968,
pp 1-2.
AIR/FTD/MT-23-201-69

Calibration of Infrared Radiation Detectors, by
J. Obadalek. 12 pp.
CZECH, per, Jemna Mechanika a Optika, No 11,
1968, pp 358-361.
ACSI-J-7727
FSTC-HT-23-157-70

Development of Emitters and Collector Multilayer
Systems, by H. Hubner. 92 pp.
GERMAN, Research Paper, Aug 1968, 118 pp.
NASA TT F-12,570

Multiradar - a Composite Radar Computer System
for Automatic Air Control, by D. Gallrein.
GERMAN, per, Elektronische Datenverarbeitung,
No 5, 1968, pp 213-220.
*NASA TT F-12,711

Communications Equipment Industry Examines
Status, by M. Tietze, 5 pp.
GERMAN, per, Fernmeldetechnik, East Berlin,
Oct 1969, pp 292-294.
JPRS 49450

Advances of Telephone, Teletype System Traced,
by M. Petzold, 15 pp.
GERMAN, per, Fernmeldetechnik, East Berlin,
Oct 1969, pp 295-300.
JPRS 49450

Scientific
Navigation, Communications, Detection
& Countermeasures (Contd)

Recording and Interpreting Echo Signatures with
a 3-cm Target Tracking Radar, by B. Bruderer.
GERMAN, per, der Ornithologische Beobachter,
Vol 66, No 3, 1969, pp 70-88.
Dept of Navy APL/JHU T-2342

Antenna System on the AVIA Surveillance Radar,
by L. Kiernozychi. 25 pp.
POLISH, per, Prace Ptt, 1968, No 59-60, pp 17-32.
ACSI-J-7576
FSTC-HT-23-336-70

Status of Atomic Submarines and Development
Prospects. 8 pp.
POLISH, per, Przegląd Morski, No 2, 1968,
pp 39-44.
AIR/FTD/MT-23-1162-68

Nuclear Science & Technology

Prospects for Treating Water from Nuclear
Electric Power Stations with Pulverized
Ionites, by O. I. Martynova, N. P. Subbotina,
8 pp.
RUSSIAN, per, Atomnaya Energiya, Moscow,
Vol 27, No 2, Aug 1969, pp 91-95.
JPRS 49539

Biological Shielding of Ship Reactors, by
D. L. Broder.
RUSSIAN, bk, Biologicheskaya Zashchita
Sudovyykh Reaktorov, 1964, 408 pp.
*AEC-tr-7097
*UC-41
*CFSTI TT 70-50006

Gamma Emission of Radioactive Fallout,
by Yu. A. Izrael', E. D. Stukin, 223 pp.
RUSSIAN, bk, Gamma - izluchenie radio-
aktivnykh vypadeniy, 1967
*AEC-tr-7100
*UC-41
*CFSTI TT 70-50008

Radioactive Methods, by V.G. Vasil'ev,
25 pp.
RUSSIAN, per, Geologiya Nefti: sravochnik
Vol, 3, pp. 406-431, 1964
*CFSTI TT 70-50066

Accelerating Resonator for the VEPP-2 Storage Ring, by V. G. Veshcherevich, M. M. Karliner, 12 pp.
RUSSIAN, rpt, Preprint 272, Inst Nuclear Phy, Siberian Acad of Science, 1969.
AEC/SLAC-Tr-103-69

High-Frequency Power Supply of the VEPP-2 Storage Ring, by Ye. I. Gorniker, M. M. Karliner, et al, 12 pp.
RUSSIAN, rpt, Preprint 285, Inst Nucl Phy, Siberian Acad of Science, 1969.
AEC/SLAC-Tr-104-69

Preliminary Results of a Study of the ρ -Meson Resonance Using Colliding Electron-Positron Beams, by V. Ye. Balakin, G. I. Budker, 12 pp.
RUSSIAN, rpt, Preprint 327, Inst Nucl Phy, Siberian Acad of Science, 1969.
AEC/SLAC-Tr-105-69

Direct Excitation of Nuclear Fission Degrees of Freedom at Low Energies, by P. Ye. Vorotnikov, 13 pp.
RUSSIAN, per, Yadernaya Fiz, Vol 5, No 5, 1967, pp 1021-1027.
AEC/BNL-Tr-169-69

Measures for Improved Use of Atomic Reactor, by Khr. Khristov, S. Ruskov, 19 pp.
BULGARIAN, per, Spisanie na Bulgarskata Akademiya na Naukite, Sofia, Vol 14, No 3-4, Sept 1969, pp 67-82.
JPRS 49522

Treatment and Conditioning of Solid Radioactive Wastes, by P. Cerre, E. Mestre, 17 pp.
FRENCH, rpt, CEA-2147.
AEC/BNWL-Tr-38

Burst Can Detection on a Heavy Water Moderated Reactor, by J. Grisolle.
FRENCH, per, Energie Nucleaire, Vol 10, Dec 1968, pp 502-505.
CEGB/C.E. Trans 5240

Nuclear Research at Congo Center Reviewed, 6 pp.
FRENCH, np, La Tribune Africaine, Kinshasa, 19 Aug 1969, p 5; 20 Aug 1969, p 7; 21 Aug 1969, p 7.
JPRS 49534

Radiation Protection Device, by Erich Tschirf, 11 pp.
GERMAN, rpt.
ACSI-J-7046
ID 1306012900

Some Problems of Radiation Protection in Space Flights. Part 3, by H. Swart.
GERMAN, per, Astron. Raumfahrt, Vol 5, No 2, 1967, pp 57-64.
*AEC/ORNL-Tr-2253

Advances of Isotope, Radiation Techniques Traced, by K. Uhlig, 17 pp.
GERMAN, per, Isotopenpraxis, East Berlin, Sept-Oct 1969, pp 313-319.
JPRS 49485

The Laser Gyroscope, by Peter Kahlen, 23 pp.
GERMAN, per, Vermessungstechnische Rundschau, No 7, 1969, pp 241-256.
ACSI-J-7326
FSTC-HT-23-119-70

Preparations for first Nuclear power Station Outlined, by Mihaly Ocsai, 28 pp.
HUNGARIAN, per, Energia es Atomtechnika, Budapest, July 1969, pp 339-351.
JPRS 49380

Electric Power Research Institute Aids Nuclear Power Plant Project, by Tamas Zettner, 12 pp.
HUNGARIAN, per, Energia es Atomtechnika, Budapest, July 1969, pp 364-368.
JPRS 49380

Physics

Laws of Transfer in Non-Newtonian Liquids, by B. M. Berkovskiy, A. V. Lykov, 13 pp.
RUSSIAN, bk, AN BSSR, Institut Teplo- i Massobmena. Teplo- i Massobmen v Nen'yutonovskikh Zhidkostyakh Moskva, 1968, pp 5-14.
ATR/FTD/MT-24-306-68

The Problem of Heat Exchange Non-Fourier Anomalous-Viscous Liquids, by B. M. Berkovskiy, Z. P. Shul'man, et al, 22 pp.
RUSSIAN, bk, AN BSSR, Institut Teplo- i Massobmena. Teplo- i Massobmen v Nen'yutonovskikh Zhidkostyakh Moskva, 1968, pp 15-37.
ATR/FTD/MT-24-306-68

Influence of Feed (Suction) and Dynamic Instability on Friction in Boundary Layer of Exponential Liquid, by Z. P. Shul'man, B. M. Berkovskiy. 25 pp.
RUSSIAN, bk, AN BSSR, Institut Teplo- i Massoobmena. Teplo- i Massoobmen v Nen'yutonovskikh Zhidkostyakh Moskva, 1968, pp 38-57.
AIR/FTD/MT-24-306-68

Development of Investigations in the Field of Hydrodynamics and Heat Exchange on Non-Newtonian Liquids in the USSR, by K. Vikhterle. 4 pp.
RUSSIAN, bk, AN BSSR, Institut Teplo- i Massoobmena. Teplo- i Massoobmen v Nen'yutonovskikh Zhidkostyakh Moskva, 1968, pp 58-60.
AIR/FTD/MT-24-306-68

Dynamic and Thermal Boundary Layers in Non-Newtonian Liquid, by K. I. Strakhovich, S. L. Lur'ye. 10 pp.
RUSSIAN, bk, AN BSSR, Institut Teplo- i Massoobmena. Teplo- i Massoobmen v Nen'yutonovskikh Zhidkostyakh Moskva, 1968, pp 61-68.
AIR/FTD/MT-24-306-68

Certain Questions of Hydrodynamics and Heat Exchange of Structurally-Viscous Media, by S. S. Kutateladze, Ye. M. Khabakhpashava, et al. 27 pp.
RUSSIAN, bk, AN BSSR, Institut Teplo- i Massoobmena. Teplo- i Massoobmen v Nen'yutonovskikh Zhidkostyakh Moskva, 1968, pp 69-90.
AIR/FTD/MT-24-306-68

Determination of Dependence of Coefficient of Thermal Conductivity of Shear Stress in the Complete Instrument, by B. M. Berkovskiy, N. D. Kovalevskaya. 5 pp.
RUSSIAN, bk, AN BSSR, Institut Teplo- i Massoobmena. Teplo- i Massoobmen v Nen'yutonovskikh Zhidkostyakh Moskva, 1968, pp 91-94.
AIR/FTD/MT-24-306-68

Heat Exchange During Isothermal Flow of Molten Plastics in Pipes, by M. S. Samoylov, N. V. Tyabin. 13 pp.
RUSSIAN, bk, AN BSSR, Institut Teplo- i Massoobmena. Teplo- i Massoobmen v Nen'yutonovskikh Zhidkostyakh Moskva, 1968, pp 95-104.
AIR/FTD/MT-24-306-68

Approximate Methods of Solution of Boundary Layer Equations for Exponential Liquids, by Z. P. Shul'man, B. M. Berkovskiy, et al. 29 pp.
RUSSIAN, bk, AN BSSR, Institut Teplo- i Massoobmena. Teplo- i Massoobmen v Nen'yutonovskikh Zhidkostyakh Moskva, 1968, pp 105-128.
AIR/FTD/MT-24-306-68

Axial Laminar Flow of Non-Newtonian Liquid Through a Concentric Slot Between Revolving and Motionless Cylinders, by V. V. Konsetov, N. A. Lebedev. 11 pp.
RUSSIAN, bk, AN BSSR, Institut Teplo- i Massoobmena. Teplo- i Massoobmen v Nen'yutonovskikh Zhidkostyakh Moskva, 1968, pp 129-136.
AIR/FTD/MT-24-306-68

Stability of Flow of Non-Newtonian Liquid in a Flat Channel, by V. Ye. Ayerov, B. A. Kolovandin. 11 pp.
RUSSIAN, bk, AN BSSR, Institut Teplo- i Massoobmena. Teplo- i Massoobmen v Nen'yutonovskikh Zhidkostyakh Moskva, 1968, pp 137-145.
AIR/FTD/MT-24-306-68

Heat Exchange in Initial Sections of Round Pipes and Flat Channels During Laminar Flow of Non-Newtonian Liquids, by O. V. Domanskiy, V. V. Konsetov. 13 pp.
RUSSIAN, bk, AN BSSR, Institut Teplo- i Massoobmena. Teplo- i Massoobmen v Nen'yutonovskikh Zhidkostyakh Moskva, 1968, pp 146-156.
AIR/FTD/MT-24-306-68

Friction and Heat Exchange in Initial Hydrodynamic Section of Round Pipe and Flat Channel During Laminar Flow of Non-Newtonian Liquids, by V. V. Konsetov, O. V. Domanskiy. 14 pp.
RUSSIAN, bk, AN BSSR, Institut Teplo- i Massoobmena. Teplo- i Massoobmen v Nen'yutonovskikh Zhidkostyakh Moskva, 1968, pp 157-167.
AIR/FTD/MT-24-306-68

Use of Visual Representation for Determination of Velocities in Liquids, by B. M. Smol'skiy, B. I. Fedorov, et al. 10 pp.
RUSSIAN, bk, AN BSSR, Institut Teplo- i Massoobmena. Teplo- i Massoobmen v Nen'yutonovskikh Zhidkostyakh Moskva, 1968, pp 168-176.
AIR/FTD/MT-24-306-68

Experimental Investigation of Convective Heat Exchange of a Circular Cylinder in Forced Flow of Non-Newtonian Liquid, by B. M. Smol'skiy, B. I. Fedorov, et al. 16 pp.
RUSSIAN, bk, AN BSSR, Institut Teplo- i Massoobmena. Teplo- i Massoobmen v Nen'yutonovskikh Zhidkostyakh Moskva, 1968, pp 177-189.
AIR/FTD/MT-24-306-68

Use of the Induction Anemometer for Investigation of the Structure of Liquid Flows, by N. I. Bolonov, B. A. Kolovandin, et al. 10 pp.
RUSSIAN, bk, AN BSSR, Institut Teplo- i Massoobmena. Teplo- i Massoobmen v Nen'yutonovskikh Zhidkostyakh Moskva, 1968, pp 190-197.
AIR/FTD/MT-24-306-68

Influence of Surface Active Agents on Hydraulic Resistances and Structure of Flow of Gas-Liquid Dispersion in an Annular Vertical Channel, by Ye. G. Leonov, Yu. P. Finat'yev, et al. 11 pp. RUSSIAN, bk, AN BSSR. Institut Teplo- i Massobmena. Teplo- i Massobmen v Nen'yutovskikh Zhidkostyakh Moskva, 1968, pp 231-238. AIR/FTD/MT-24-306-68

Method of Measurement of Thermophysical Characteristics of Liquid Varnish and Paint Materials, by B. M. Smol'skiy, Z. P. Shul'man, et al. 12 pp. RUSSIAN, bk, AN BSSR. Institut Teplo- i Massobmena. Teplo- i Massobmen v Nen'yutovskikh Zhidkostyakh Moskva, 1968, pp 239-246. AIR/FTD/MT-24-306-68

Investigation of the Thermophysical Characteristics of Viscous Liquids in Wide Interval of Temperatures, by S. A. Tanayeva. 7 pp. RUSSIAN, bk, AN BSSR. Institut Teplo- i Massobmena. Teplo- i Massobmen v Nen'yutovskikh Zhidkostyakh Moskva, 1968, pp 247-251. AIR/FTD/MT-24-306-68

Investigation of the Rheological Equation of State and Parameters of the Rheological Curve of Solutions Based on Furan Resins in the Process of their Polymerization, by A. M. Gutkin, S. V. Nesenchuk. 6 pp. RUSSIAN, bk, AN BSSR. Institut Teplo- i Massobmena. Teplo- i Massobmen v Nen'yutovskikh Zhidkostyakh Moskva, 1968, pp 252-256. AIR/FTD/MT-24-306-68

Experimental Investigation of the Influence of Different Factors on the Process Polymerization of Plastic Solutions Based on Furfural Acetone Monomer, by A. Kh. Kim, S. V. Nesenchuk. 9 pp. RUSSIAN, bk, AN BSSR. Institut Teplo- i Massobmena. Teplo- i Massobmen v Nen'yutovskikh Zhidkostyakh Moskva, 1968, pp 257-264. AIR/FTD/MT-24-306-68

Measuring the Plasma Energy in the Tokamak-3 Device, by S. V. Smirnov, 46 pp. RUSSIAN, rpt, Akad Nauk SSSR, Institute Atomnoi Energi. AEC/MATT-Tr-87

A polar reagents and their action during flotation, by V.A. Glembotskiy et al. RUSSIAN, bk, Apoliarnye reagenty i ikh deistvie pri flotatsiy, 1968 *CPSTI TT 70-50061

Spectra and Structure of the Phtoreduced Forms of Porphyrins in an Acid Medium, by A. N. Sidorov, D. A. Savel'yev, 9 pp. RUSSIAN, per, Biofizika, Vol 13, No 6, 1968, pp 993-997. AEC/ANL-Tr-779-69

Dynamics of Emission of Semiconductor Injection Lasers, by N. G. Basov, V. V. Nikitin, et al. 56 pp. FOR OFFICIAL USE ONLY RUSSIAN, bk, Dinamika Izlucheniya Poluprovodnikovkh Inzhetsionnykh Lazero, 1968, pp 1-98. AIR/FTD/HT-23-1348-68

Calculation of Internal Reflections During Analysis of the Properties of a Laser With a Bleachable Filter, by A. M. Samson. 6 pp. RUSSIAN, per, Doklady AN BSSR, Vol 12, No 9, 1968, pp 773-775. AIR/FTD/HT-23-477-69

Experimental Determination of Energy Parameters of a Ruby Generator, by A. N. Rubinov, T. I. Smol'skaya. 9 pp. RUSSIAN, per, Doklady AN BSSR, Vol 12, No 9, 1968, pp 781-785. AIR/FTD/HT-23-477-69

Effect of Spatial Coherence of Primary Emission on Intensity of the Harmonic, by B. A. Sotskiy. 6 pp. RUSSIAN, per, Doklady AN BSSR, Vol 12, No 19, 1968, pp 888-891. AIR/FTD/HT-23-476-69

The Thermal Regime of a Gas Laser, by L. N. Orlov. RUSSIAN, per, Dok Ak Nauk BSSR, Vol 13, No 6, 1969, pp 498-501. Dept of Navy APL/JHU CLB-3 T-606

Combustion of Certain Organic Perchlorates, by V. D. Alekhin. 7 pp. RUSSIAN, per, Dok Ak Nauk SSSR, Vol 185, No 4, 1969, pp 856-859. NASA TT F-12,659

Absorption Outburst of Laser Radiation and the Gasdynamic Effects Connected with it, by G. G. Vilenskaya. RUSSIAN, per, Dok Ak Nauk SSSR, Vol 186, No 5, 1969, pp 1048-1051. *Dept of Navy APL/JHU J-1439

Scientific
Physics (Contd)

A Holographic Method for the Transformation of Coherent Light Fields, by M. D. Bondarenko.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol 187, No 3, 1969, pp 538-540.
*Dept of Navy APL/JHU J-1426

Physics of Plasma and Problems of Controllable Thermonuclear Synthesis (Selected Articles), Vol 1 of 2. 671 pp.
RUSSIAN, bk, Doklady Konferentsiya po Fizike Plazmy i Problemy Upravlyayemykh Termoyadernogo Sintez. 4th. Kharkov, 1963, 1965, pp 1-387; 388-402; 403-440; 421-431; 431-441 only.
AIR/FTD/MR-24-288-68 Vol 1 of 2

Physics of Plasma and Problems of Controllable Thermonuclear Synthesis (Selected Articles), Vol 2 of 2. 671 pp.
RUSSIAN, bk, Doklady Konferentsiya po Fizike Plazmy i Problemy Upravlyayemykh Termoyadernogo Sintez. 4th. Kharkov, 1963, 1965, pp 1-387; 388-402; 403-440; 421-431; 431-441 only.
AIR/FTD/MR-24-288-68 Vol 2 of 2

Investigation of Radiation of a Dense Plasma Obtained Through the Detonation of Fine Wire in a Vacuum, by A. P. Ryazin.
RUSSIAN, bk, Fizicheskaya Gazodinamika Ioniz i Khim Reagiryuyushchikh Gazov, 1968, pp 36-39.
*NASA TT F-12,793

Investigation of Plasma Parameters Obtained Through the Electrical Detonation of Fine Wire, by V. S. Shumanov.
RUSSIAN, bk, Fizicheskaya Gazodinamika Ioniz i Khim Reagiryuyushchikh Gazov, 1968, pp 78-81.
*NASA TT F-12,794

Comparative Characteristics of Electrical Reactions in Sympathetic Efferent Neurons to Centrifugal and Centripetal Effects, by I. A. Bulygin, O. Ye. Sokolovsky. 13 pp.
RUSSIAN, per, Fiziologicheskii Zhurnal SSSR, im. I. M. Sechenova, No 4, 1969, pp 445-453.
ACSI-J-6953
ID 2204004569

Linear Problems in the Hydrodynamic Study of a Wing Flying Above the Interface Between Fluids of Different Densities, by A. N. Panchenkov.
RUSSIAN, per, Gidrodinamika Bol'shikh Skorostey, No 1, 1965, pp 7-20.
Dept of Navy APL/JHU CIB-3 T-597

Investigation of the Action of Flotation Reagents, by V. I. Solnyshkin, 108 pp.
RUSSIAN, mono, Issledovanie deystviya flotatsionnykh reagentov, 1968
*CFSTI TT 70-50023

Scientific
Physics (Contd)

Vavilov-Cherenkov Radiation and Its Uses in High-Energy Physics, Vol. 1, by V. P. Zrelov, 287 pp.
RUSSIAN, bk, Izluchenie Vavilova-Cherenkova i ego primeneniye v Fizike Vysokikh Energii Chast' I, 1968
*AEC-tr-7099
*(Vol. 1)-UC-34
*CFSTI TT 70-50003/1

Vavilov-Cherenkov Radiation and its Uses in High-Energy Physics, Vol. 2, by V. P. Zrelov, 300 pp.
RUSSIAN, bk, Izluchenie Vavilova-Cherenkova i ego primeneniye v Fizike vysokikh energii Chast' II, 1968
*AEC-tr-7099
vol 2-UC-34
*CFSTI TT 70-5003/2

A Magnetic Field in a Channel of Rhomboidal Cross-section in the Presence of a Steel Magnetic Conductor, by S. A. Ganzayeva, Ye. I. Yantovskiy 10 pp.
RUSSIAN, per, Izvestiya AN SSSR. Energetika i Transport, No 2, 1968, pp 28-33.
AIR/FTD/HT-23-876-68

Theory of One-dimensional Adiabatic Motion of an Ideal Gas, by M. D. Ustinov.
RUSSIAN, per, Izv AN SSSR, Mekh Zhid i Gaza, No 3, 1969, pp 136-138.
*Dept of Navy APL/JHU J-1436

Turbulent Diffusion of Components in a Two-phase Flow, by Yu. T. Borshchevskiy, A. M. Kolodin.
RUSSIAN, per, Izv Ak Nauk SSSR, Mekh Zhid i Gaza, No 3, 1969, pp 152-154.
Dept of Navy APL/JHU T-2365

Plane Hypersonic Gas Stream, by M. I. Folle.
RUSSIAN, per, Izv AN SSSR, Mekh Zhid i Gaza, No 4, Jul-Aug 1969, pp 66-72.
*NASA TT F-12,796

Heat Exchange in Region of Interaction of an Axi-symmetric Supersonic Stream with an Obstacle, by N. Ye. Khranov.
RUSSIAN, per, Izv AN SSSR, Mekh Zhid i Gaza, No 4, Jul-Aug 1969, pp 134-136.
*NASA TT F-12,797

Calculation of Hypersonic Axisymmetric Flows with the Aid of Optical Measurement Results, by Ye. P. Kazandzhan.
RUSSIAN, per, Izv ANSSSR, Mekh Zhid i Gaza, No 4, Jul-Aug 1969, pp 146-148.
*NASA TT F-12,799

Experimental Investigation of Separated Flows Behind a Flat Ledge, by R. K. Tagirov.
RUSSIAN, per, Izv ANSSSR, Mekh Zhid i Gaza, No 4, Jul-Aug 1969, pp 153-157.
*NASA TT F-12,800

Numerical Method for Solving Non-stationary Axisymmetric Problems of Hydrodynamics of an Ideal Fluid with Free Surfaces, by G. A. Konstantinov.
RUSSIAN, per, Izv ANSSSR, Mekh Zhid i Gaza, No 4, Jul-Aug 1969, pp 162-165.
*NASA TT F-12,801

Calculation of the Secondary Flow in the Turbulent Liquid Flow, by M. Kh. Ibragimov.
RUSSIAN, per, Izv ANSSSR, Mekh Zhid i Gaza, No 4, Jul-Aug 1969, pp 166-170.
*NASA TT F-12,802

Viscous Liquid Flow in the Initial Section of a Flat Channel with Porous Walls, by V. N. Varapayev.
RUSSIAN, per, Izv ANSSSR, Mekh Zhid i Gaza, No 4, Jul-Aug 1969, pp 176-181.
*NASA TT F-12,803

Low-frequency Intensity Fluctuations from Remote Sources in the Infrared Band, by M. V. Kabanov.
RUSSIAN, per, Izv VUZ Fizika, No 9, 1968, pp 121-125.
*ACSI-J-7818
*FSTC-HT-23-440-70

Influence of a Transverse Magnetic Field on the Power and Polarization of the Emission of a Helium-neon Laser at 3.39-micron Wavelength, by V. M. Kulybin.
RUSSIAN, per, Izv VUZ Fizika, No 10, 1968, pp 130-134.
*ACSI-J-7835
*FSTC-HT-23-414-70

Three-component Optical System with a Variable Focal Length from the Infrared Region of the Spectrum.
RUSSIAN, per, Izv VUZ Priborostroyeniye, Vol 10, No 11, 1967, pp 86-88.
*ACSI-J-7815
*FSTC-HT-23-462-70

Synthesis of Arrays of Passive Dipoles, by A. F. Chaplin.
RUSSIAN, per, Izv VUZ Radioelektronika, Vol 12, No 6, 1969, pp 559-562.
Dept of Navy APL/JHU T-2361

Far Tropospheric Propagation of Short and Medium Waves, by V. Ya. Arsenin, V. V. Ivanov.
RUSSIAN, per, Izv VUZ Radiofiz, Vol 12, No 6, 1969, pp 838-845.
Dept of Navy APL/JHU T-2356

Thermodynamic Properties of SF₆, by O. D. Lagutkin.
RUSSIAN, per, Kholodil'n Tekhn, Vol 39, No 1, 1962, pp 24-29.
CEGB/C.E. Trans 5203

Flexure Theory of Structural Fiberglass Beams, by L. I. Kalender'yan. 14 pp.
RUSSIAN, per, Kiyev. Inzhenerno-Stroitel'nyy Institut. Soprotivleniye Materialov i Teoriya Sooruzheniy, No 6, 1968, pp 155-164.
AIR/FTD/HT-23-236-69

Crystallization. approx 400 pp.
RUSSIAN, bk, Kristallizatsiya, 1970.
CONSULTANTS BUREAU/PLENUM PRESS

Lasers With Greater Dispersion Angles, by A. M. Ratner. approx 176 pp.
RUSSIAN, bk, Kvantovye Generatory Sveta s Bol'shim Uglovym Rasseyeniym, 1970.
CONSULTANTS BUREAU/PLENUM PRESS

Ohm's Law for a Partially Ionized Plasma in Crossed Electric and Magnetic Fields at High Diffusion Rates, by Ye. P. Vaulin.
RUSSIAN, per, Magnitnaya Gidrodinamika, Vol 4, Jan-Mar 1968, pp 9-14.
*NASA TT F-12,845

Mechanical Properties of Ordered Solid Solutions, by L. Ye. Popov, Ye. V. Kozlov. approx 192 pp.
RUSSIAN, bk, Mekhanicheskie Sovistva Uporyadochennykh Tverdykh Rastvorov, 1970.
CONSULTANTS BUREAU/PLENUM PRESS

Physico-chemical Phenomena Associated with the Action of Liquid Metals on Solids, by V. I. Nikitin.
RUSSIAN, bk, Mekhanizm Vozeystviya Zhidkikh Metallov na Tverdye Nakhidyashchiesya v Napryazhennom Sostoyaniy, 1967.
*ACSI-J-7836
*FSTC-HT-23-415-70

Soviet Laser Goniometer. 2 pp.
RUSSIAN, per, Nauka i Zhizn', No 5, 1965,
p 92
AIR/FTD/HT-23-1315-68

Transport Coefficients in a Plasma in the TM-3
Tokamak, by G. A. Bobrovskiy, Ye. I. Kuznetsov,
16 pp.
RUSSIAN, rpt, Order of Lenin, Atomic Energy Inst
im I. V. Kurchatov, Oct 1969.
AEC/Matt-Tr-93-69

Organic Semiconductors, by A. A. Dulov,
A. A. Slinkin. approx 96 pp.
RUSSIAN, bk, Organicheskie Poluprovodniki, 1970
CONSULTANTS BUREAU/PLENUM PRESS

Movement of Atoms in a Crystalline Lattice,
123 pp.
RUSSIAN, bk, Podvizhnost' stomov v Kriistall
icheskoii resketke, Akademiya Nauk USSR,
1965
*CFSTI TT 70-50029

Semiconductors, by M. S. Saminskiy. 440 pp.
RUSSIAN, bk, Poluprovodniki, 1967, pp 1-440.
AIR/FTD/HT-23-1333-68

Rotary Inductosyn -- General Information and Error
Theory, by Donat Alekseyevich Bychatin,
Igor Yakovlevich Gol'dman, 30 pp.
RUSSIAN, per, Povorotnyy Induktosin, Leningrad,
1969, pp 3-31.
JPRS 49509

Silica Dilatometer for Low Temperatures I. Thermal
Expansion of Copper and Aluminum, by P. G. Strelkov,
S. I. Novilova, 12 pp.
RUSSIAN, per, Pribery Tekh Eksp, Vol 5, No 5,
1957, pp 105-110.
AEC/Sc-Tr-1054-69

One-dimensional Flows in Electrohydrodynamics,
by V. V. Gogosov.
RUSSIAN, per, Prikl Mat i Mekh, Vol 33, No 2,
1969, pp 232-240.
*Dept of Navy APL/JHU J-1434

Approximate Solutions and Asymptotic Expansions
for the Problem of Boundary-layer Development
During Acceleration, by O. A. Oleinik.
RUSSIAN, per, Prikl Mat i Mekh, Vol 33, No 3,
1969, pp 441-450.
*Dept of Navy APL/JHU J-1432

Surface Tensions of Solids, by A. Ya. Gokhshetyn.
22 pp.
RUSSIAN, per, Priroda, No 12, 1960, 13 pp.
NASA TT F-12,553

New Contribution to the Theory of Turbulent
Flow, by D. A. Frank-Kamenetskiy.
RUSSIAN, per, Priroda, No 10, 1969, pp 74-75.
*NASA TT F-12,504

Problems of Cavitation, by A. D. Pernik.
Vol 1 of 2. 401 pp.
RUSSIAN, bk, Problemy Kavitatsii, 1966,
pp 1-216 english pages
AIR/FTD/HT-23-802-68 Vol 1 of 2

Problems of Cavitation, by A. D. Pernik.
Vol 2 of 2. 401 pp.
RUSSIAN, bk, Problemy Kavitatsii, 1966,
pp 217-401 english pages
AIR/FTD/HT-23-802-68 Vol 2 of 2

Radiation Physics of Nonmetallic Crystals.
approx. 400 pp.
RUSSIAN, bk, Radiatsionnaya Fizika Nemetalli-
cheskikh Kristallov, 1970.
CONSULTANTS BUREAU/PLENUM PRESS

Accelerating Structure for a High-Energy Proton
Linear Accelerator, by V. G. Andreyev, 14 pp.
RUSSIAN, rpt, Radiotech Institute of the Academy
of Sciences, 1968.
AEC/BNL-Tr-287-69

Modern RF Accelerating Structures for Proton
Linear Accelerators, by V. G. Andreyev, 6 pp.
RUSSIAN, rpt, Radiotechnical Inst Acad Sci USSR,
1969.
AEC/BNL-Tr-290-69

Production and Properties of Rare Earth Metal
Monocrystals, by Ye. M. Savitskiy. 9 pp.
RUSSIAN, per, Rost Kristallov, Vol 6, 1965,
pp 301-307.
NASA TT F-2,632

A Theory of an Erosion Plasma Source, by
V. V. Balyberdin, N. A. Khizhnyak. 10 pp.
RUSSIAN, per, Samoletostroyeniye i Tekhnika
Vozdushnogo Flota, No 11, 1967, pp 35-41.
AIR/FTD/MT-24-173-69

Approximate Solution of Some Nonstationary
Boundary Layer Problems with Allowance for
Magnetic Field, by D. V. Sharikadze.
RUSSIAN, per, Soobscheniya Akademiy Nauk Gruz
SSR, Vol 45, Jan 1967, pp 43-46.
*NASA TT F-12,832

Theory of Unitary Symmetry, by Yu. B. Rumer,
A. I. Fet. approx 320 pp.
RUSSIAN, bk, Teoriya Unitarnoi Simmetrii, 1970.
CONSULTANTS BUREAU/PLENUM PRESS

Probability Distribution of an Area Bounded by
a Random Gaussian Contour, by V. I. Klyatskin,
V. I. Tatarskiy.
RUSSIAN, per, Teoriya Veroyatnostey i ee
Primeneniya, Vol 14, No 2, 1969, pp 357-363.
Dept of Navy APL/JHU T-2358

Heat and Mass Transfer, by A. V. Lykova,
B. M. Smol'kogo. 1-243 pp. Part 1 of 3
RUSSIAN, bk, Teplota i Massopereenos, Vol 7,
1968, pp 1-609.
AIR/FTD/HT-23-820-68 Part 1 of 3

Heat and Mass Transfer, by A. V. Lykova,
B. M. Smol'kogo. 244-462 pp. Part 2 of 3
RUSSIAN, bk, Teplota i Massopereenos, Vol 7,
1968, pp 1-609.
AIR/FTD/HT-23-820-68 Part 2 of 3

Heat and Mass Transfer, by A. V. Lykova,
B. M. Smol'kogo. 463-649 pp. Part 3 of 3
RUSSIAN, bk, Teplota i Massopereenos, Vol 7,
1968, pp 1-609.
AIR/FTD/HT-23-820-68 Part 3 of 3

Turbulent Boundary Layer in the Initial Section
of a Tube Under Conditions of Nonisothermicity
and Blowing, by A. I. Leontyev. 14 pp.
RUSSIAN, per, Teplotiz Vysokikh Temperatur,
Vol 7, No 2, 1969, pp 276-283.
NASA TT F-12,356

Means for Graphic Interpolation of the Results
of Calculations of Chemical Nonequilibrium
Flows in Nozzles, by V. M. Khaylov. 6 pp.
RUSSIAN, per, Teplotiz Vysokikh Temperatur,
Vol 7, No 2, 1969, pp 284-287.
NASA TT F-12,357

Experimental Investigation of Distribution
Parameters in Single-phase and Double-phase
Subsonic Plasma Flows, by N. S. Surov. 13 pp.
RUSSIAN, per, Teplotiz Vysokikh Temperatur,
Vol 7, No 2, 1969, pp 304-312.
NASA TT F-12, 363

Experimental Research on the Condensation Process
in a Supersonic Flow, by G. A. Mukhachev. 13 pp.
RUSSIAN, per, Teplotiz Vysokikh Temperatur, Vol 7,
No 2, 1969, pp 318-326.
NASA TT F-12,386

Research on the Flow of Moist Vapor in Axis-
symmetrical Laval Nozzles Within a Broad
Range of Degrees of Moisture, by
M. Ye. Deych. 10 pp.
RUSSIAN, per, Teplotiz Vysokikh Temperatur,
Vol 7, No 2, 1969, pp 327-333.
NASA TT F-12,418

Thermodynamics of High-Temperature Gases,
by V. V. Rybakov, M. P. Burgasov. 107 pp.
RUSSIAN, BK, Termodinamicheskii Raschet
Vysokotemperaturnogo Gaza, 1968, pp 1-115.
AIR/FTD/HT-23-113-69

Diffusion Siliconizing of Molybdenum, Tungsten,
and Niobium in Molten Salts, by
A. I. Anfinogonov, N. G. Ilyushchenko, et al.
8 pp.
RUSSIAN, per, Trudy AN SSSR. Ural'skiy Filial.
Institut Elektrokhimii, No 11, 1968, pp 67-73.
AIR/FTD/HT-23-440-69

Estimation of Some Components of the Turbulent
Energy Balance, by P. A. Vorontsov.
RUSSIAN, per, Trudy Glav Geofiz Observ, No 185,
1966, pp 72-76.
*Dept of Navy APL/JHU J-1446

Surface Interaction Between Molten Oxides and
Refractory Metals, by B. S. Mitin, V. Ya. Levin.
RUSSIAN, rpt, Trudy Leningrad, Seminar po
Zharostoykim Pokrytiyam, 3d, 1966, Temperatury-
stoychivyye Zashchitnyye Pokrytiya, 1968,
pp 310-316.
AIR/FTD/HT-23-253-69

Shock Waves in Real Gas, by T. V. Bazhenova.
187 pp.
RUSSIAN, bk, Udarnyye Volny v Realnykh Gazakh,
1968, pp 15-195.
NASA TT F-585

On the Theory of Absorption of Infrared Rays by
Nonideal Ion Crystals, by I. P. Dzyub. 10 pp.
RUSSIAN, per, Ukrayins'kyy Fizychnyy Zhurnal,
Vol 11, No 7, 1966, pp 752-758.
AIR/FTD/HT-23-185-68

Ultrasound Treatment of Metals, by
V. P. Sevardenko, K. V. Gorov, et al. 154 pp.
RUSSIAN, bk, Ul'trazvukovaya Obrabotka Metallov,
1966, pp 1-158.
AIR/FTD/MT-24-439-68

The Laser of "moving Substance", by B. L. Livshits.
RUSSIAN, per, Usp Fiz Nauk, Vol 98, No 2, 1969,
pp 393-398.
*Dept of Navy APL/JHU J-1422

Effect of Hydrostatic Pressure on the Ionic Conductivity and Self-Diffusion in Single Crystals of AgCl and AgCl_2 , by B. G. Lur'e, An. N. Murin, 17 pp.
RUSSIAN, per, Vest Leningrad Univ, Seriya Fiziki Khimii, 23(22), 1968, pp 131-138.
AEC/UCRL-Tr-10382-69

Symmetry and the Boltzmann Distribution, by A. Yender.
RUSSIAN, per, Vestnik Len Univ Ser Mat Mekh i Astron, Vol 19, No 4, 1966, pp 110-120.
Dept of Navy APL/JHU CLB-3 T 612

Methods of SiC Surface and p-n Junction Treatment, by G. M. Afanas'yeva, I. V. Ryzhikov, et al. 5 pp.
RUSSIAN, rpt, Vsesoyuznaya Konferentsiya Pekarbidu Kremniya, Kiev 1964. Karbid Kremniya, 1964, pp 265-267.
AIR/FTD/MT-24-21-69

Viscosity of Gases and Gas Mixtures, by I. F. Golubev, 375 pp.
RUSSIAN, mono, Vyazkost' gazov i Gazovykh smesey, 1959
*CFSTI TT 70-50022

Effect of the Optical-Model Parameters on Channel Analysis of the Neutron Induced Nuclear Fission, by S. B. Yermagambetov, S. B. Kolesov, 22 pp.
RUSSIAN, per, Yadern Fiz, No 8, 1969, pp 704-712.
AEC/BNL-Tr-273

Effect of Fluctuations of the Partial Widths on the Competition between Fission and Inelastic Scattering, by N. S. Rabotnov, 10 pp.
RUSSIAN, per, Yadern Fiz, No 9, 1969, pp 775-778.
AEC/BNL-Tr-275

Certain Questions of Diffusion Theory, by M. A. Krishtal.
RUSSIAN, per, Zashchitnyye Polrytiya na Metallakh, No 2, 1968, pp 7-28.
*NASA TT F-12, 809

Diffusion of Nickel and Indium Along Grain Boundaries in Iron, by M. A. Krishtal.
RUSSIAN, per, Zashchitnyye Polrytiya na Metallakh, No 2, 1968, pp 209-216.
*NASA TT F-12, 807

Investigation of the Nature of Turbulent Processes in a Shock-wave Front in a Plasma, by A. G. Yes'kov.
RUSSIAN, per, Zh Eksperim i Teor Fiz, Vol 56, No 5, 1969, pp 1430-1440.
*Dept of Navy APL/JHU J-1435

Angular Distribution of Matter Evaporated by a Laser Beam, by Yu. A. Bykovskiy.
RUSSIAN, per, Zh Eksperim i Teor Fiz, Vol 56, No 6, 1969, pp 1815-1818.
*Dept of Navy APL/JHU J-1440

Quantum Theory of Lasers, by A. P. Kazantsev.
RUSSIAN, per, Zh Eksperim i Teor Fiz, Vol 56, No 6, 1969, pp 2001-2018.
*Dept of Navy APL/JHU J-1441

Some Questions on the Theory of Potential Variation of Electrode Layers, by G. A. Lyubimov.
10 pp.
RUSSIAN, per, Zh Prik Mekh i Tekh Fiz, No 4, 1964, pp 10-15.
NASA TT F-12, 531

Two-speed Theory of a Flow Past a Thin Profile, by Kh. A. Rakhmatulin.
RUSSIAN, per, Zh Prik Mekh i Tekh Fiz, No 4, Jul-Aug 1969, pp 32-35.
*NASA TT F-12, 789

Structure of an Oblique Shock Wave at High Mach Numbers, by Yu. A. Berezin.
RUSSIAN, per, Zh Prik Mekh i Tekh Fiz, No 4, Jul-Aug 1969, pp 100-104.
*NASA TT F-12, 790

Experimental Investigation of the Turbulent Boundary Layer, by V. P. Lebedev.
RUSSIAN, per, Zh Prik Mekh i Tekh Fiz, No 4, Jul-Aug 1969, pp 112-115.
*NASA TT F-12, 773

Possibility of Obtaining a Negative Absorption Coefficient in Chelate Compounds of Rare-Earth Elements, by D. P. Gribkovskiy, V. V. Kuznetsova, 16 pp.
RUSSIAN, per, Zh Prikladnoy Spektroskopiy, Vol 1, No 4, 1964, pp 340-347.
AEC/UCRL-Tr-10383-69

Detection of Gravity Waves with a Superconducting Resonant Element, by G. Ya. Lavrent'yev.
RUSSIAN, per, Zh Tekh Fiz, Vol 39, No 7, 1969, pp 1316-1320.
*Dept of Navy APL/JHU J-1426

Scientific
Physics (Contd)

On Optimization of Methods for Solving Boundary Problems in the Presence of Boundary Layer, by A. S. Balchvalov.
RUSSIAN, per, Zhurnal Vych Mat i Mat Fiz, Vol 9, No 4, 1969, pp 841-859.
*Dept of Navy APL/JHU J-1423

Analytical and Numerical Study of Vortical Transonic Gas Flows, by O. M. Belotzerkovskiy.
RUSSIAN, per, Zh Vych Mat i Mat Fiz, Vol 9, No 4, 1969, pp 908-931.
*Dept of Navy APL/JHU J-1424

Free Axis-symmetric Oscillations of Slender Elastic Shells of Rotation, by G. I. Pshenichnov.
RUSSIAN, per, Zh Vych Mat i Mat Fiz, Vol 9, No 5, 1969, pp 1202-1207.
*NASA TT F-12,707

Numerical Calculation of a Supersonic Viscous Perfect Gas Flow Past a Sphere, by V. K. Molodtsov.
RUSSIAN, per, Zh Vych Mat i Mat Fiz, Vol 9, No 5, 1969, pp 1211-1217.
*NASA TT F-12,708

Vibratory Temperature Sensor, by N. V. Verashinskiy 3 pp.
RUSSIAN, Patent No. 189,178, 2 Sept 1965, 1966 pp 1-2.
AIR/FTD/HT-23-1397-68

A Method for Determining the Transition From a Laminar to a Turbulent Boundary Layer, by A. S. Mozol'kov, V. M. Filippov. 3 pp.
RUSSIAN, Patent No. 200,833, 8 Aug 1966, 1967, pp 1-2.
AIR/FTD/HT-23-1486-68

A Microcalorimeter for Measuring Laser Energy, by V. V. Mamladze, G. A. Gol'dshteyn, et al. 2 pp.
RUSSIAN, Patent No. 206,719, 8 Jan 1965, 1968, pp 1-2.
AIR/FTD/HT-23-205-69

Diffusion of High-density Radiation in a One-dimensional Medium, by V. N. Silvers.
UKRAINIAN, per, Ukr Fiz Zh, Vol 14, No 6, 1969, pp 990-995.
*Dept of Navy APL/JHU J-1442

Light Absorption by Molecular Crystals, by B. M. Nitsovich.
UKRAINIAN, per, Ukr Fiz Zh, Vol 14, No 6, 1969, pp 1013-1018.
Dept of Navy APL/JHU T-611 CLB-3

Scientific
Physics (Contd)

Heat Transfer in a Gas-Tube Bundle Exposed to Sound Vibrations, by L. G. Gal'fenbeyn, A. A. Kasatkin. 6 pp.
UKRAINIAN, per, Ukraine. Ministerstvo Vysshego i Srednego Spetsial'nogo Obrazovaniya. Akustika i Ul'trazvukovaya Tekhnika, No 3, 1968, pp 53-58.
AIR/FTD/HT-23-257-69

Development of Infrared Spectrometers in Recent Years, by I-shan Cheng. 27 pp.
CHINESE, per, K'o Hsueh I Ch'i, Vol 4, No 4, 1966, pp 145-154.
AIR/FTD/HT-23-1299-68

A Study of the Infrared Spectrum of the Adsorbed State of Ethyl Alcohol on Aluminum Oxide, by Chuan Liang, Liang Tai, et al. 9 pp.
CHINESE, per, Kung-kuo K'o-hsueh-yuan Hua-hsueh Wu-li Yen-chiu-yen-chiu Poa-kao Chi-k'an, No 4, 1965, pp 37-42.
AIR/FTD/HT-23-738-67

The Analysis of the Structures, of Alkyl Pyridines, by Kuo-nan Sung, Shih-kang Yen, 13 pp.
CHINESE, per, Kung-kuo K'o-hsueh-yuan Hua-hsueh Wu-li Yen-chiu-yen-chiu Poa-kao Chi-k'an, No 4, 1965, pp 55-65.
AIR/FTD/HT-23-738-67

Influence of the Blade Tip Clearance of an Axial Flow Compressor On Its Parameters, by Stefan Szczecinski. 9 pp.
CZECH, per, Tech Lotnicza i Astronautyczna, Vol 24, No 4, 1969, pp 9-12.
NASA TT F-12,653

Radio-Isotope Converter, by Thierry Alleau, Bernard Devin, 15 pp.
FRENCH, rpt, CEA-R-2788, June 1966.
AEC/ORNL-Tr-1389-69

Study of Gamma-Radiation Between 0.1 and 1 MeV in the Earth's Atmosphere, by Daniel Boclet, 93 pp.
FRENCH, rpt, CEA-R-3177.
AEC/ORNL-Tr-2207-69

Infrared Absorption Spectra of the Sulfates of Nickel, Cobalt, Zinc and Magnesium, by C. Rocchiccioli 6 pp.
FRENCH, per, Comptes Rend, 257, 1963, pp 3851-3854.
AEC/ORNL-Tr-1547-69

Effect of Entrainment of the Active Medium of an Annular Gas Laser, by Edmond Batifol.
FRENCH, per, Comptes Rendus, Vol 263, 1966, pp 146-149.
Dept of Navy APL/JHU T-2360

Stability Criterion of a Natural Convection Boundary Layer on a Vertical and Isothermal Plane Wall, by Marcel Jannot, G. Mordchelles-Regnier, 5 pp.
FRENCH, per, Compt Rend, Ser A & B, 267, 1968, pp 617-620.
AEC/ORNL-Tr-2181

Measurement of Potential in an Electron-dominated Plasma, by A. Quemeneur.
FRENCH, rpt, EUR-CEA-TC-529, Oct 1969, pp 1-53.
*NASA TT F-12,847

Molecular Structures and Odors, by L. Peyron.
FRENCH, per, France Parf, No 7, 1964, pp 397-405
HFW NIII
11-6-69

Determination of the Gruneisen Coefficient as a Function of the Specific Volume by Means of Studying the Reflection Phenomenon of Mach, by J. Leygonie, J. Cl. Bergon, 14 pp.
FRENCH, rpt, International Symposium on Behavior of Dense Media Under High Dynamic Pressures, Sept 11-15, 1967, pp 161-172.
AEC/SC-Tr-1053-69

Some New Results on the Disintegration of ^{231}Pa TO ^{227}Ac , by H. Abou-Leila, R. Foucher, 7 pp.
FRENCH, per, Journal of Physics, Vol 24, No 11, 1963, pp 857-858.
AEC/MLM-Tr-1692-69

Optimal Transfers Between Close Elliptical Orbits, by J. P. Marec. 272 pp.
FRENCH, per, ONERA, No 121, 1967, pp 5-235.
NASA TT F-554

Study by Hydraulic Analogy of Wave Configurations in Supersonic Compressors, by Roland Sovrano.
FRENCH, rpt, Proceedings of AGARD Conference, North Atlantic Treaty Organization, Advisory Group for Aerospace Research and Development, No 34, Part I, 1969.
*NASA TT F-12,826

Flows with Simultaneous Natural Forced Convection, by R. Kh. Zaytounian.
FRENCH, per, La Recherche Aerospatiale, No 127, Nov-Dec 1968, pp 3-9.
NASA TT F-12,254

Diffusion of Gases Through Metals, by V. Lombard.
FRENCH, per, Revue de Metallurgie, Vol 26, No 7, 1929, pp 343-350.
*NASA TT F-12,806

Conclusions from Heat Transfer Measurements on the Hydrodynamic Behavior of the Phase Boundary Between Two Fluids, by H. Linda, K. Loeschke, 10 pp.

GERMAN, per, Akademie der Wissenschaften zu Berlin, Monatsberichte, Vol 9, Nos 6&7, 1967, pp 497-504.
AIR/ETD/HT-23-1327-68

Direct Determination of Transmission and Reflection Matrixes for Gamma-Rays, by A. H. Maute, 35 pp.
GERMAN, rpt, Berichte Studienges zur Forderung Kern in Schiffbau und Schifffahrt, 1968
AEC / ORNL-Tr-2214-69

Pitot-tube Measurements in Hypersonic Flows Having Low Gas Densities and High Total Enthalpies, by K. Kindler.
GERMAN, per, Deutsche Luft-und Raumfahrt, Forschungsbericht, 68-42, July 1968.
Dept of Navy APL/JHU T-2346

The use of the Associated Particle Method for Determining Detector Efficiency of Scintillation Detectors for Neutrons from the $\text{D(d,n)}^3\text{He}$ reaction, by A. Greil, K. Trutzschler, 9 pp.
GERMAN, per, Kernenergie, No 12, 1969, pp 68-73.
AEC/MLM-Tr-168-69

Fluorescence Radiation Source for Measuring Area Density and Thickness, by W. Cal.
GERMAN, per, Kerntechnik Isotopentechnik und Chemie, Vol 11, No 5, 1969, pp 431-430.
*NASA TT F-12,805

Measurement of Adsorption with an Improved Micro Balance, by Ragnar Stromberg.
GERMAN, per, Kunsl. Svenska Vetenskapsakademien Handlingar, 3 Ser. Vol. 6, No. 2, 1928, 122 pp.
*CFSTI TT 70-58025

The Multi Round Theory, by H. Brandli. 235 pp.
GERMAN, bk, Theorie des Mehrfach Schusse, 1950, pp 1-198.
ACSI-J-6097
FSTC-HT-23-702-69

Optical and Electrical Measurements of Confined Exploding Wires, by H. Jaeger, D. Rusche, 19 pp.
GERMAN, per, Z. Angew Phys, Vol 26, 1969, pp 231-238.
AEC/SC-Tr-1046-69

Effect of Surface Roughness and Potential-Determining Ion Absorption at Electrodes on the Initiation of Diffusion Polarization at Constant Current, by W. Lorenz.

GERMAN, per, Zeit Elektrochem, Vol 59, 1955, pp 730-736.

CEGB/C.E. Trans 5209

Measurement of the Absorption of Potential-determining Ions on Electrodes Using the Method of Nonsteady Concentration Polarization, by W. Lorenz.

GERMAN, per, Zeits Elektrochem, Vol 59, 1955, pp 736-740.

CEGB/C.E. Trans 5208

Thermodynamics of Carbon and Oxygen Compounds of Liquid Sodium, by Gerhard Hofer, 7 pp.

GERMAN, per, Z Metallk, Vol 60, No 5, 1969, pp 457-460.

AEC/BNWL-Tr-40

Optical Studies of the Metastable Triplet State of M-Centres in KCl, by D. Haarer, H. Pick, 12 pp.

GERMAN, per, Z Phys, Vol 200, 1967, pp 213-223.

AEC/NP-Tr-1792

Disorder Model for Semi-conductor with Characteristic Defect Centers Taking Chromium Sesquioxide as an Example, by K. Hauffe.

GERMAN, per, Zeit Phys Chem, Vol 198, 1951, pp 232-247.

CEGB/C.E. Trans 5211

Experimental Investigation on the Origin of Turbulent Tubular Flow, by A. Naumann, 27 pp.

GERMAN, per, Zeit Techn Mech und Thermodyn, Vol 2, No 3, 1931, pp 84-98.

NASA TT F-12,615

Spectroscopic Analysis with the Laser Microprobe, by Yasumitsu Katsuno, 13 pp.

JAPANESE, per, Bunko Kenkyu, Vol 16, No 4, 1968, pp 151-157.

NASA TT F-12,677

Emission Spectroscopy with Laser Excitation, by Yasumitsu Katsuno, 31 pp.

JAPANESE, per, Bunseki Kagaku, Vol 3, No 3, 1968, pp 376-394.

NASA TT F-12,681

Impedance Measurement of Stainless Steel Under Potentiostatic Polarization, by H. Shiobara.

JAPANESE, per, Nippon Kinzoku, Vol 33, No 2, 1969, pp 239-243.

*BISI 7873

The Gasdynamics of Self-Regulation of a Supersonic Plug Nozzle, by T. Gajewski, 10 pp.

POLISH, per, Technika Lotnicza i Astronautyczna, No 4, 1967, pp 12-16.

AIR/FTD/HT-23-661-68

Molecular Structure and Odor, by M. Guillot.

SPANISH, per, Ion, No 19, 1959, pp 72-75.

HEW NIH

11-7-69

Propulsion & Fuels

Gas Chromatography, by L. D. Litvinov,

B. A. Rudenko, approx 208 pp.

RUSSIAN, bk, Gazovaya Khromatografiya, 1970.

CONSULTANTS BUREAU/PLENUM PRESS

Calculating the Supersonic Section of a Laval Nozzle, by A. Sh. Dorfman, 10 pp.

RUSSIAN, per, Inzhenerno-Fizicheskiy Zhurnal, Vol 4, No 6, 1961, pp 51-57.

AIR/FTD/MT-24-172-69

Cooling of Individual Elements of Gas Turbines, by V. I. Lokay, 15 pp.

RUSSIAN, per, Izv Ak Nauk SSSR, Energ i Transport, No 3, 1968, pp 87-96.

ACSI-J-7451

FSTC-HT-23-265-70

Selecting the Efficiency and Compression Ratio in Gas Turbine Units With Complex Cycle, by V. S. Beknev, A. P. Chernobrovkin, 7 pp.

RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy. Mashinostroyeniye, No 1, 1967, pp 112-116.

AIR/FTD/MT-23-1259-68

Increasing the Efficiency of Transport gas Turbine Engines by Using Cyclical Combustion, by V. Ye. Mikhail'tsev, 9 pp.

RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy. Mashinostroyeniye, No 2, 1963, pp 107-112.

AIR/FTD/MT-24-492-68

Some Problems in the Investigation of Composite Gyromotors Accelerated by a Solid Fuel, by Yu. M. Kravchenko.

RUSSIAN, per, Izv VUZ Priborostroyeniye, Vol 10, No 12, 1967, pp 57-62.

*ACSI-J-7827

*FSTC-HT-23-460-70

Combustion of Fuels With Nonisotropic Heat Conductivity, by L. K. Gusachenko. 6 pp. RUSSIAN, rpt, Kratkiye Soobshcheniya, pp 310-312.

AIR/FTD/HT-23-362-69

Characteristics of the Centrifugal Air-Pressure Nozzle, by Ye. D. Novikov. 9 pp. RUSSIAN, per, Leningrad. Tsentral'nyy Nauchno-Issledovatel'skiy Institut Morskogo Flota. Informatsionnyy Sbornik, No 53, 1967, pp 50-60.

AIR/FTD/HT-23-256-69

Fuel Burnup and Hot-Flow Modeling of Combustion Chambers, by Ya. P. Storozhuk, V. A. Asoskov. 35 pp.

RUSSIAN, per, Trudy Leningrad. Tsentral'nyy Nauchno-Issledovatel'skiy i Proektiro-Konstruktor'skiy Kotloturbinnyy Institut, No 75, 1967, pp 110-137.

AIR/FTD/HT-23-1321-68

Electrohydraulic Speed Governor for an Engine, by M. A. Minchin, V. M. Baulin, et al. 5 pp. RUSSIAN, Patent No. 198,057, 9 Feb 1966, 1967, pp 1-3.

AIR/FTD/HT-23-1368-68

Method of Dynamic Regulation of Combustion Processes, by K. P. Stanyukovich, O. B. Khavroshkin, et al. 2 pp. RUSSIAN, Patent No. 198,833, 11 Dec 1965, 1967, p 1.

AIR/FTD/HT-23-1398-68

Device for Burning a Fuel in a Pulsating Stream, by V. V. Serveryanin. 4 pp. RUSSIAN, Patent No. 200,695, 14 Jan 1966, 1967, pp 1-3.

AIR/FTD/HT-23-1392-68

Nozzle Adjustment Problems, by Pierre Carriere. 36 pp.

FRENCH, rpt, ONERA-600, 1963, 25 pp.

NASA TT F-12,560

French Research on Turbojet Noise, by R. Hoch. 35 pp.

FRENCH, rpt, Presented at the 15th Open Seminar on Acoustics, Poznan, Poland, 19-28 Sept 1968.

NASA TT F-12,590

Study of Supersonic Compressors, by O. Conrad.

FRENCH, rpt, Proceedings of AGARD Conference, North Atlantic Treaty Organization Advisory Group for Aerospace Research and Development, No 34, Part I, 1969, pp 1-22.

*NASA TT F-12,830

Measurement of Heat Transfer in Rocket Engines. Part 2. Results and Comparison with Theoretical Computations, by Eugen Schaeffer. 30 pp. GERMAN, rpt, Ph.D. Thesis. NASA TT F-12,561

The Composition of Combustion Gases of Polyurethane Foams and Polycarbonate, by E. Hagen. 7 pp. GERMAN, per, Plaste und Kautschuk, No 6, 1967, pp 391-392.

AIR/FTD/HT-23-1474-68

Turbocompressors, by Eckert Bruno.

GERMAN, per, VDI Zeitschrift, Vol 111, No 13, 1969, pp 841-849.

*NASA TT F-12,817

Contribution to the Dual-flow Engine with Afterburner, by A. Meffert.

GERMAN, per, WGIR, Vol 9, No 12, Oct 1962, pp 360-370.

*NASA TT F-12,844

Anticorrosion Water Additives for Closed Circulation Cooling in Internal Combustion Marine Engines, by A. Grzadzila. 11 pp.

POLISH, per, Przeglad Morski, No 5, 1967, pp 25-35.

AIR/FTD/HT-23-1168-68

Space Technology

Calculation of the Motion of a Low-thrust Spacecraft, by V. N. Lebedev. 109 pp.

RUSSIAN, bk, Raschet Dvizheniya Kosmicheskogo Apparata s Maloy Tyagoy, 1968.

NAS/NASA/TT F-586-69

Manned Satellite Cabin, by Sheng Ta. 5 pp.

CHINESE, per, Hang K'ung Chih Shih, No 4, 1960, pp 14-15.

AIR/FTD/HT-23-869-68

The Veil of Secrecy is Lifted, by J. Kroulik. 12 pp.

CZECH, per, Letectvi-Kosmonautika, No 7, 1968, pp 286-289.

AIR/FTD/HT-23-96-69

Use of "Slush Hydrogen" in the Propulsion of
Spacecraft, by D. Chain.
FRENCH, rpt, Association Francaise des Ingenieurs
et Techniciens et L'Aeronautique et de l'Espace
Congress International Aeronautique, 9th, Paris,
2-4 June 1969, pp 1-19.
*NASA TT F-12,827

Miscellaneous

Role and Significance of the New Stage of
Cooperation Among Warsaw Nations in the Field
of Scientific and Technical Information, by
A. N. Kuskov, 5 pp.
RUSSIAN, per, Nauch-Tekh Inform Vses Inst
Nauch Tekh Inform, Ser 1, No 7, 1969,
pp 37-38.
NASA TT F-12,687

Academician Kirillin Questioned on Progress, by
V. A. Kirillin, 6 pp.
RUSSIAN, per, Ogonek, Moscow, No 39, Sept 1969,
pp 1-3.
JPRS 49507

Recent Siberian Technical Advances Reported,
by Vanda Beletskaya, 10 pp.
RUSSIAN, per, Ogonek, Moscow, No 39, Sept 1969,
pp 16-17.
JPRS 49507

Problems of Science, Labor Safety Discussed,
by A. Biryukova, 5 pp.
RUSSIAN, np, Trud, Moscow, 22 Oct 1969, p 2.
JPRS 49477

Belorussian Academy of Sciences Meeting Held,
by A. Ya. Faktarovich, L. M. Hardsiyenka, 11 pp.
RUSSIAN, per, Vesti Akademii Nauk BSSR, Seriya
Byelakichnykh Nauk, Minsk, No 3, 1969, pp 127-
132.
JPRS 49491

Chemical Science in Bulgarian Academy Described,
by D. Shopov, 8 pp.
BULGARIAN, per, Spisanie na Bulgarskata
Akademiya na Naukite, Sofia, Vol 14, No 3-4,
Sept 1969, pp 45-50.
JPRS 49522

Scientific Cooperation of Academy Described,
by I. Feykov, 11 pp.
BULGARIAN, per, Spisanie na Bulgarskata
Akademiya na Naukite, Sofia, Vol 14, No 3-4,
Sept 1969, pp 83-90.
JPRS 49522

The Jivaros, by Philippe Ziegler.
FRENCH, per, Connaissance du Monde, No 119,
Nov 1968, pp 39-51.
*ACSI-J-7289

French Journalists Visit Soviet Scholars, by
Dominique Verguesse, 15 pp.
FRENCH, np, Le Monde, Paris, 4 Nov 1969,
pp 1, 10; 5 Nov 1969, p 10; 6 Nov 1969, p 13.
JPRS 49500

Frozen Fish in Hamburg, 5 pp.
GERMAN, per, Allgemeine Fischwirtschaftszeitung,
Vol 21, No 27, 1969, pp 8-10.
Dept of Inter
BCF/OFF
A-33/Nov 69/120
On Loan Only

Travel Report on the Visit of an East
German Inland Fisheries Study Delegation
to the USSR, by H. W. Blume, G. Predel.
GERMAN, per, Deutsche Fischerei Zeitung,
Vol. 16, No. 9, Sept. 1969, pp. 253-265.
*CFSTI TT 70-58023

Leonardo Da Vinci and the Woodpecker's Tongue, by
G. Bilancioni.
ITALIAN, per, Riv Storia Crit Sci Med Nat, No 178,
1926, pp 221-230.
HEW NIH
10-31-69

Seventh Meeting of the Mixed Commission Secre-
tariat, 8 pp.
POLISH, per, Biuletyn Zjednoczenia Gospodarki
Rybniej, Vol 5, No 4(47), 1968, pp 78-82.
Dept of Inter
BCF/OFF
A-33/Nov 69/81
On Loan Only

In the Shade of Big Fisheries, by J. Harkowicz.
6 pp.
POLISH, per, Tygodnik Morski, Vol 11, No 28,
1958, pp 1, 11.
Dept of Inter
BCF/OFF
A-33/Nov 69/87
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Acta Biochimica Polonica, Vol 16, No 2, 1969.
CFSTI TT 69-50010/2

Fiziologiya Rasteniy, Vol 16, No 3, May-June 1969.
CB

Acta Physiologica Polonica, Vol 19, No 6, 1968.
CFSTI TT 68-50008/6

Geologiya Nefti i Gaza, Vol 8, No 5, 1964.
Petroleum Geology

Arhiv Bioloskih Nauka, Vol 19, No 1-2, 1967.
CFSTI TT 67-58013

Geologiya Nefti i Gaza, Vol 8, No 6, 1964.
Petroleum Geology

Denki Gakkai Zasshi, Vol 89, No 5, 1969.
IEEE

Gigiena i Sanitariya, Vol 35, No 1-12, 1970.
*CFSTI TT 70-50048/1-4

Denshi Tsushin Gakkai Ronbunshi, Vol 52, No 4, 1969. IEEE
Glasnik Hemijskog Društva - Beograd, Vol 34, No 11, 1969.
CFSTI TT 69-51006/1

Doklady Akademiy Nauk SSSR, Vol 185, No 1-6, Nov 1969.
AGI

Izvestiya Akademiy Nauk SSSR, Atmosfery i Okeanologicheskii, Vol 5, No 5, 1969.
The American Geophysical Union

Doklady Akademiy Nauk SSSR, Vol 186, No 1-3, May 1969.
CB

Izvestiya Akademiy Nauk SSSR, Atmosfery i Okeanologicheskii, Vol 5, No 6, 1969.
The American Geophysical Union

Doklady Akademiy Nauk SSSR, Vol 186, No 4-6, June 1969.
The Am Inst of Phys
Vol 14, No 6, Dec 1969

Izvestiya Akademiy Nauk SSSR, Fiziki Zemli, No 7, 1969.
The American Geophysical Union

Doklady Akademiy Nauk SSSR, Vol 187, No 1-6, 1969.
The Am Math Soc
Vol 10, No 4, July-Aug 1969

Izvestiya Akademiy Nauk SSSR Metally, No 4, 1968.
The Scientific Information Consultants

Fizika Tverdogo Tela, Vol 11, No 6, 1969.
The Am Inst of Phys
Vol 11, No 6, Dec 1969

Izvestiya Akademiy Nauk SSSR, Seriya Fizicheskaya, Vol 32, No 12, 1968.
The Columbia Technical Translation

Izvestiya VUZ, Radioelektronika, Vol 10, No 1, 1967.
The Faraday Press

Izvestiya VUZ. Radiofizika, Vol 10, No 1, 1967. The Faraday Press	Steklo i Keramika, Vol 26, No 5-6, May-June 1969. CB
Kibernetika, Vol 3, No 1, Jan-Feb 1967. The Faraday Press	Tekhnika i Vooruzheniye, No 6, 1969. ACSI J-7419
Kosmicheskaya Biologiya i Meditsina, Vol 3, No 5, 1969. JPRS 49533	Tekhnika i Vooruzheniye, No 7, 1969. ACSI J-7136
Meteorologiya i Gidrologiya, No 11, 1969. JPRS 49628	Tekhnika i Vooruzheniye, No 8, 1969. ACSI J-7238
Optika i Spektroskopiya, Vol 26, No 5, 1969. The Optical Society of America	Tekhnika i Vooruzheniye, No 11, 1969. *ACSI J-7753
Pochvovedeniye, No 2, 1969. The Soil Science Society of America	Tsvetnye Metally, Vol 41, No 3, 1968. Primary Sources Vol 9, No 3, 1968
Polskie Archiwum Medycyny Newnietrznej, Vol 40, No 11, 1968. CFSTI TT 69-50007/4 Vol 8, No 4, 1969	Tyl i Snabzheniye Sovetskikh Vooruzhennykh Sil, No 4, 1969. ACSI J-6798
Polski Przegląd Radiologii i Medycyny Nuklearnej, Vol 33, No 1, 1969. CFSTI TT 69-50002/1	Tyl i Snabzheniye Sovetskikh Vooruzhennykh Sil, No 6, 1969. ACSI J-6900
Przegląd Epidemiologiczny, Vol 22, No 3-4, 1968. CFSTI TT 68-50000/3-4	Tyl i Snabzheniye Sovetskikh Vooruzhennykh Sil, No 10, 1969. *ACSI J-7627
Sopštenja, Vol 14, No 44, 1968. CFSTI TT 68-50060/1-4	Uspekhi Fizicheskikh Nauk, Vol 96, Sept-Oct 1968. The Am Inst of Phys Vol 11, No 5, Mar-Apr 1969
Staub Reinhaltung der Luft, Vol 30, No 1-12, 1970. *CFSTI TT 70-50047/1-12	Vestnik Akademiy Meditsinskikh Nauk SSSR, Vol 24, No 11, 1969. JPRS 49620
Steklo i Keramika, Vol 26, No 1-2, Jan-Feb 1969. CB	Vestnik Akademiy Nauk SSSR, Vol 39, No 10, 1969. JPRS 49447
Steklo i Keramika, Vol 26, No 3-4, Mar-Apr 1969. CB	Vestnik Protivovzduшной Oborony, No 6, 1969. ACSI J-6903

Vestnik Protivovozdushnoy Oborony, No 10, 1969.
*ACSI J-7653

Vestnik Svyazi, Vol 29, No 9, 1969.
JPRS 49448

Vestnik Svyazi, Vol 29, No 10, 1969.
JPRS 49505

Voyenno-Meditsinskiy Zhurnal, No 6, 1969.
ACSI J-6902

Voyenno-Meditsinskiy Zhurnal, No 10, 1969.
*ACSI J-7655

Voyennyy Vestnik, No 1, 1969.
ACSI J-5239

Voyennyy Vestnik, No 5, 1969.
ACSI J-6904

Voyennyy Vestnik, No 10, 1969.
*ACSI J-7654

Vysokomolekulyarnye Soyedineniya, Vol 11, No 2,
Series A, 1969.
Pergamon Press

Yadernaya Fizika, Vol 9, No 2, 1969.
The Am Inst of Phys
Vol 9, No 2, Aug 1969

Yadernaya Fizika, Vol 9, No 3, 1969.
The Am Inst of Phys
Vol 9, No 3, Sept 1969

Zhurnal Analiticheskoy Khimiy, Vol 24, No 5, 1969.
CB

Zhurnal Eksperimental'noy Teoreticheskoy Fiziki,
Vol 55, No 6, Dec 1968.
The Am Inst of Phys
Vol 28, No 6, 1969

Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki,
Vol 56, No 1, 1969.
The Am Inst of Phys
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Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki,
Vol 56, No 2, 1969.
The Am Inst of Phys
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Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki,
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Zhurnal Obshchey Khimiy, Vol 39, No 5, 1969.
CB

Zhurnal Obshchey Khimiy, Vol 39, No 6, 1969.
CB

Zhurnal Prikladnoy Khimiy, Vol 42, No 5, 1969.
CB

Zhurnal Prikladnoy Khimiy, Vol 42, No 6, 1969.
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CORRECTIONS

The authors have called attention to the following misprints:

V. S. Sobčuk, *Riemannian spaces admitting a generalized recursive symmetric tensor of second order*, Vol. 10 (1969), no. 2, 512-516.

On page 513, the equation on line 3 should have the number (6) and that on line 4 should have the number (7) instead of (6). The equation on line 6 should be unnumbered.

On page 514, in the equation (20), replace $|g_{1\gamma}t_{\gamma}|$ by $|k_{\alpha} - k_{\beta}|$.

A. A. Samarskiĭ, *Two-layer integration schemes for nonselfadjoint equations*, Vol. 10 (1969), no. 3, 554-558.

On page 555, line 14, $C = (A^{-1} + \omega E)^{-1}$ should be $C = (A^{-1} + \omega E)^{-1}$.

On page 556, lines 15-16, $A_0 = \frac{1}{2}(A - A^*)$ should be $A_0 = \frac{1}{2}(A + A^*)$.

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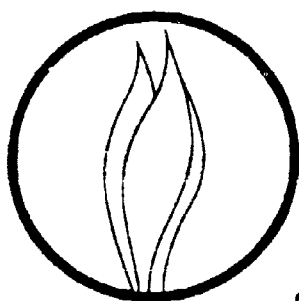
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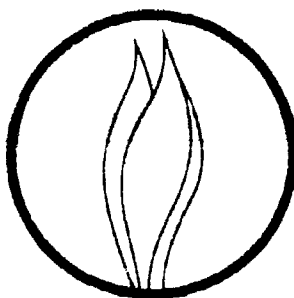
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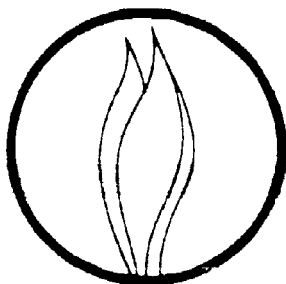
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RUSSIAN ABBREVIATIONS IN TEXT

AN SSSR..... Academy of Sciences, USSR
Giredmet..... State Rare Metals Scientific Research Institute.
GOST..... All-Union Standard.
Mekhanobr..... Scientific Research Institute for the Mechanical Concentration of Minerals.
VAMI..... All-Union Aluminum and Magnesium Institute.
VIMS..... All-Union Scientific Research Institute of Mineral Raw Materials.
VNIITsvetmet..... All-Union Scientific Research Institute of Non-Ferrous Metals.

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Washington, D.C. 20505

7 September 2004

Ms. Roberta Schoen
Deputy Director for Operations
Defense Technical Information Center
7725 John J. Kingman Road
Suite 0944
Ft. Belvoir, VA 22060

Dear Ms. Schoen:

In February of this year, DTIC provided the CIA Declassification Center with a referral list of CIA documents held in the DTIC library. This referral was a follow on to the list of National Intelligence Surveys provided earlier in the year.

We have completed a declassification review of the "Non-NIS" referral list and include the results of that review as Enclosure 1. Of the 220 documents identified in our declassification database, only three are classified. These three are in the Release in Part category and may be released to the public once specified portions of the documents are removed. Sanitization instructions for these documents are included with Enclosure 1.

In addition to the documents addressed in Enclosure 1, 14 other documents were unable to be identified. DTIC then provided the CDC with hard copies of these documents in April 2004 for declassification review. The results of this review are provided as Enclosure 2.

We at CIA greatly appreciate your cooperation in this matter. Should you have any questions concerning this letter and for coordination of any further developments, please contact Donald Black of this office at (703) 613-1415.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sergio N. Alcivar".

Sergio N. Alcivar
Chief, CIA Declassification Center,
Declassification Review and Referral
Branch

Enclosures:

1. Declassification Review of CIA Documents at DTIC (with sanitization instructions for 3 documents)
2. Declassification Status of CIA Documents (hard copy) Referred by DTIC (with review processing sheets for each document)

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Processing of OGA-Held CIA Documents

The following CIA documents located at DTIC were reviewed by CIA and declassification guidance has been provided.

OGA Doc ID	Job Num	Box	Fldr	Doc	Doc ID	Document Title	Pub Date	Pages	Decision	Proc Date
AD0866011	78-03109A	63	1	8	145	Consolidated Translation Survey Through 31 January 1970	1/31/1970	237	Approved For Release	3/25/2004
AD0866891	78-03109A	64	1	1	146	Consolidated Translation Survey Through 28 February 1970	2/28/1970	237	Approved For Release	3/25/2004
AD0868214	78-03109A	64	1	2	147	Consolidated Translation Survey Through 31 March 1970	3/31/1970	222	Approved For Release	3/25/2004
AD0869588	78-03109A	64	1	3	148	Consolidated Translation Survey Through 30 April 1970	4/30/1970	225	Approved For Release	3/25/2004
AD0871388	78-03109A	64	1	4	149	Consolidated Translation Survey Through 31 May 1970	5/31/1970	286	Approved For Release	3/25/2004
AD0872361	78-03109A	64	1	5	150	Consolidated Translation Survey Through 30 June 1970	6/30/1970	339	Approved For Release	3/25/2004
AD0873815	78-03109A	64	1	6	151	Consolidated Translation Survey Through 31 July 1970	7/31/1970	274	Approved For Release	3/25/2004
AD0834385	78-03109A	47	1	4	17	Consolidated Translation Survey For May 1959	6/17/1959	193	Approved For Release	3/25/2004
AD0834386	78-03109A	47	1	5	18	Consolidated Translation Survey For June 1959	7/17/1959	177	Approved For Release	3/25/2004
AD0834387	78-03109A	47	1	6	19	Consolidated Translation Survey For July 1959	8/24/1959	254	Approved For Release	3/25/2004
AD0834388	78-03109A	47	1	7	20	Consolidated Translation Survey For August 1959	9/18/1959	209	Approved For Release	3/25/2004
AD0834389	78-03109A	47	1	8	21	Consolidated Translation Survey For September 1959	10/20/1959	261	Approved For Release	3/25/2004
AD0834491	78-03109A	47	1	9	22	Consolidated Translation Survey For October 1959	11/16/1959	181	Approved For Release	3/25/2004
AD0834492	78-03109A	47	1	10	23	Consolidated Translation Survey For November 1959	12/22/1959	214	Approved For Release	3/25/2004
AD0834493	78-03109A	47	1	11	24	Consolidated Translation Survey For December 1959	1/20/1960	202	Approved For Release	3/25/2004
AD0834494	78-03109A	47	1	12	25	Consolidated Translation Survey For January 1960	2/25/1960	198	Approved For Release	3/25/2004
AD0834495	78-03109A	47	1	13	26	Consolidated Translation Survey For February 1960	2/1/1960	248	Approved For Release	3/25/2004
AD0834496	78-03109A	48	1	1	27	Consolidated Translation Survey For March 1960	3/1/1960	223	Approved For Release	3/25/2004
AD0834497	78-03109A	48	1	2	28	Consolidated Translation Survey For April 1960	4/1/1960	287	Approved For Release	3/25/2004
AD0834498	78-03109A	48	1	3	29	Consolidated Translation Survey For May 1960	5/1/1960	312	Approved For Release	3/25/2004
AD0834499	78-03109A	48	1	4	30	Consolidated Translation Survey For June 1960	6/1/1960	277	Approved For Release	3/25/2004
AD0834500	78-03109A	48	1	5	31	Consolidated Translation Survey For July 1960	7/1/1960	186	Approved For Release	3/25/2004
AD0834501	78-03109A	48	1	6	32	Consolidated Translation Survey For August 1960	8/1/1960	317	Approved For Release	3/25/2004
AD0834502	78-03109A	48	1	7	33	Consolidated Translation Survey For September 1960	9/1/1960	287	Approved For Release	3/25/2004
AD0834503	78-03109A	48	1	8	34	Consolidated Translation Survey For October 1960	10/1/1960	322	Approved For Release	3/25/2004
AD0834504	78-03109A	48	1	9	35	Consolidated Translation Survey For November 1960	11/1/1960	289	Approved For Release	3/25/2004